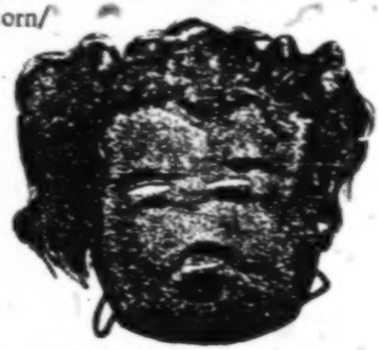
/341 cont./

241 ladder, that is, a thick branch with deep cuts for steps. Captain
115 Karnapadyú's chacra /cultivated clearing/ was about 200 meters by 70 meters in size. At the edge stood a small wooden hut covered with straw.

The "Captain" began by showing me some manioc plants and had me cross a large square sown exclusively with beans and gourds /citronilles/. The corn fields came next. They were divided in two by a second hedge formed of trunks and thorns. Squash /courges/ grew between the rows of corn. After the maízal /field of corn/ followed a second expanse covered with beans, squash, and melons, which Karnapadyú told me belonged to his daughter. Here and there rose several stalks of sorghum. A new cornfield was opposite the first, and another cabin rose at its edge. In both of these properties the only plants cultivated for their manufacturing value were the cucurbitaceous ones from which the Indians make their cups and bottles.



241 Fig. 8. Mask (tovaraanga) carved
532 out of a calabash and provided with
322 hair and eyebrows of horsehair. It
237 was hung up in a planted field where it was serving as a scarecrow. Prov.: Carurutí. (1/5 nat. size.)

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[322]
[415]
[824]

Next, on the opposite cliff, I visited the chacra of another Indian of the same village. A steeper and more difficult road than the first led to it. The plantation was lower down a hill on which a little hut was perched. These fields were almost solely covered with corn among whose stalks grew squash. As before, the maízales were preceded by plantings of beans and squash.

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Fig. 16. Perch with troughs for tame parrots which the Chiriguano use for catching wild ones. Prov.: Ñawirenda. (1/10 nat. size.)

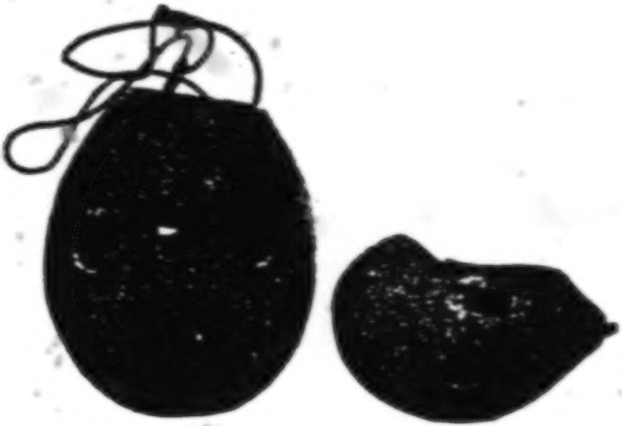

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Fig. 17. [illegible]rated calabashes in which the Chiriguano put chicks to protect them from birds of prey. Prov.: a. Carurutí; b. Ibopeytí. (1/4 nat. size.)

/352 cont./

C 252 The fish begins by being opened and cleaned and only then is it boiled or roasted. In this last case it is inserted between the two branches of a switch split for three quarters of its length (Fig. 22). So that the latter does not open completely, the lower part is fastened securely with bands of bark, and so that the fish does not fall out once it is inserted in the interstice, the upper part. G [252] Among their ancestors, the Guarani, such a spit would have been superfluous, because to grill the product of their fishing or hunting they used to construct buccans. C [251] [262] Our Chiriguano also eat fish dried in the sun and enjoy it in this form combined with some corn dish.

/353/

Chapter IV

Cooking

Fire

C 372 177 The modern Chiriguano more and more use matches of Bolivian make, but their poor quality has contributed to maintaining the popularity of the tinderbox. That of the Chiriguano, borrowed recently from the white men, is composed of a flint and a piece of iron with which they make sparks fly, which fall on a little wild cotton (the one which the fruit of the palo borracho (Chorisia insignis) produces). This tow (tata rimbiuna) is kept in a small receptacle made from the end of a cow horn or an armadillo tail. /Figs. 23 and 24 appear here./ It is hermetically sealed by a wooden disk, which a small cord passing inside the capsule and coming out through a hole at the tip of the horn or tail allows to be put back in place with a single motion. This ingenious contrivance is not, however, of Indian invention; I saw it adapted to the tinderboxes of the creoles in the Argentine Republic. Some Chiriguano make cloth wicks which at first sight would seem to have been produced in one of our factories. C [415] [281] The tinderbox with its accessories is carefully kept in small bags of deerskin, wildcat, iguana, etc. (Figs. 23 and 24).

353 cont./

372 [171] In former times the Chiriguano made fire exactly like all the Indians of South America, by rubbing two sticks one against /354/ each other. One of my friends from Carurutí reconstructed one of these devices for me in the hope of surprising me and getting a good price for it. He took two sticks of *tata iwira*, or fire wood (1), cut one of them lengthwise and provided one of its sides with two cups along which he contrived a perpendicular groove. These two little furrows were intended to conduct the glowing sawdust onto the tinder placed on the ground. /Fig. 25 appears here./ The other stick was slightly sharpened to allow it to go into the cups. Since this

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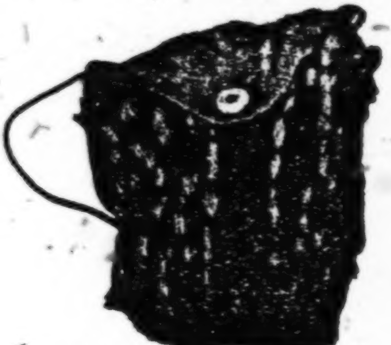

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Fig. 23. Small deerskin bag in which a Chiriguano used to carry a tinderbox and its accessories. Prov.: Pípi. (1/3 nat. size.)

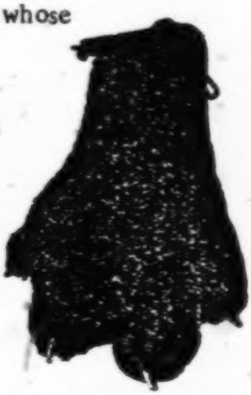

Fig. 24. Puma paw (*yagua-pintaipo*) made into a bag. Prov.: Saladito. (1/4 nat. size.)

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[824] 1. According to Father D. Giannechini (*Diccionario Chiriguano-Español*, etc., p. 91), the Chiriguano might use, for obtaining fire by rotation, sticks made from the wood of a red liana whose
372 [824] flower has five yellow petals with a red spot on one of them. The Chiriguano name for this plant is *isipo-pinta*.

262 /355 cont./ Women could eat, without
[562] harm, parrot, a heavy and stupid bird. In their misogyny the Chiriguano doubtless figured that that would not change their nature in any way. (Campana, p. 92.)

252 Cooking is not a secondary activity; it is an important form /Fig. 26 appears here/ of the material culture and an excellent index for judging the cultural level of a human group. The art of preparing dishes reveals as well as any tool the faculties of invention and taste. In South America one can very well classify the tribes according to the more or less great variety of their dishes and the care they take in preparing them. This hierarchy would certainly correspond to that of the cultural elements.

[171] In the Chaco, Chiriguano cooking stands in contrast by its variety, its /356/ taste, and its cleanness to that of the more primitive tribes like the Toba or the Matako.

Before passing on to the study of the utensils used by the Chiriguano housewives, it is fitting to describe their menus.

When the Chiriguano kill a cow, goat, or sheep, the meat is boiled in water, roasted on a spit, or dried in the sun (charqui). They are especially partial to the head of the animal they kill, and they eat it boiled after skinning it. The pieces of meat are cleaned carefully before being cooked; and the tripe, for example, which is a delicacy, is taken out beforehand.

Corn is prepared in various ways. If the ears are tender and green, they are boiled in water or grilled over the fire or under the ashes.

When the corn is still in this state, the women prepare simbikuai or humitas (in Spanish). They bite with an appetite into the still tender ears, chew the kernels for a long time, and spit them into a calabash. This white mash saturated with saliva is wrapped in corn leaves and put under the ashes.

● [415] The Chiriguano give the name of atipíi to kernels of corn roasted in a special bowl called tapuipe (Plate XIII, 3) or in large potsherds, which tend more and more to replace the primitive utensil appropriate for this use. The atipíi requires

/356 cont./

252 no preparation other than constant stirring in order not to be burned. This food takes the place of bread for the Chiriguano, who like to munch these crunchy and appetizing kernels. They provide themselves with it when they go on a trip.

Atipíi pounded in a mortar and passed through a sieve gives atɨi, a brownish flour which has an excellent taste. Atɨi is also prepared differently: kernels of corn are reduced to a flour which is roasted in a terra-cotta roaster or in a wide potsherd. According to Nino (p. 246), the name atikúi would be given to the kernels of roasted corn made into flour after being put through a sieve and ground until pulverized. The same missionary reserves the term atɨi for roasted flour obtained from the residue left by kernels which have been treated in the following way: after letting them soak in water all night, they are poured into a sieve the next morning. When the water has drained off, they are pounded in a mortar. This flour is now sifted, then roasted; cooked in water, it is the dish the Chiriguano call muintí or huinti. Atɨi then would be made with the residue from the muinti flour, which is ground again, then roasted like it, but first mixed with salt or pimento. I [122] have often eaten roasted corn flour which the Indians told me was atɨi, but I could never tell that it was seasoned. The Chiriguano give the name abatikure to the corn bran.

This is how muintimimo is prepared: kernels of corn are /Plate XIII appears here/ /357/ put to soak all night. The next morning they are ground and sifted in an urumpé (sieve with very fine mesh). The flour is poured into a muitero ● [415] (Plate XIII, 1 and 2). This utensil is a terra-cotta basin whose bottom is pierced with holes like a skimmer (1). The flour is

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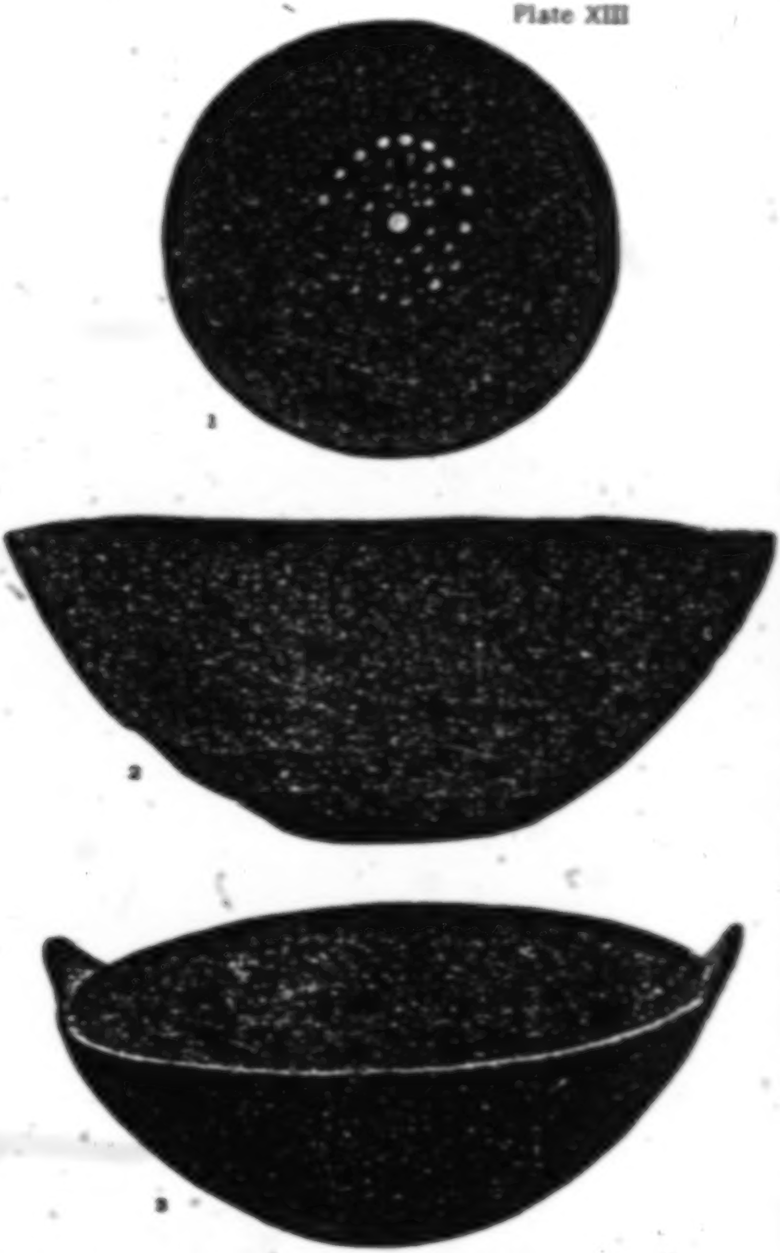
1. Linné (2, Map 1, p. 23) has given us the distribution of vessels with perforated bottoms throughout America. The enumeration he makes of them is very complete; yet it lacks mention of La Rioja in the Argentine Republic where Boman (5, p. 17) discovered fragments of vessels whose bases were entirely perforated like a sieve.

[Text continues on p. 104]

Plate XIII



1 and 2 Basin with perforated bottom for preparing muintimimo, flour cooked in steam. Prov.: Ivu. (1/4 nat. size.) -- 3. Basin for roasting corn kernels or flour (tapuipe). Prov.: Saladito. (1/4 nat. size.)

/363 cont./

234 To end up, one could still cite among Chiriguano food
262 the cheese they make in some villages. Each time they
butcher they take care to keep the abomasus in order to make
[199] milk separate. Chiriguano cheeses are of the same quality as
those of the half-breeds, who for once have taught something
[292] to our Indians. I shall add that I have never seen a Chiriguano
drink milk.

312 The problem of water does not come up for the Chiriguano
133 as for the other Indians of the Chaco. Numerous rivers cross
their territory, and several of them are large enough not to dry
up even in the middle of the dry season. These watercourses
form innumerable quebradas, gorges or valleys, which give
its characteristic aspect to the country inhabited by our Indians.
[361] Sometimes villages are built near springs or small lakes, like
the Ivu mission, which is provided with plenty of water.

312 When I crossed the Caipipendí valley, the river which
occupies the bottom was nearly dry. The Indians had scooped
out small wells about one meter in depth in the sand of its
bed. They had surrounded them with slabs of stone to prevent
any caving in and to preserve the water which accumulated in
them from the heat of the sun. In this same valley, in a village
situated on top of a hill, the Indians had dug a cistern four to
five meters in diameter in which rain water had collected.

271 The Chiriguano have found a way to purify the muddy
312 water they often have to drink. They crush caraguatá leaves
824 between two stones, then steep them in the water, and all its
impurities settle as a result of the action of the juice of this plant.

264 The Chiriguano do not eat at set times. They make a
rather substantial breakfast very early in the morning and again
take some food toward the middle of the day. In the evening
[562] about six o'clock they make a kind of dinner. Since the men
are served first, then the women and children, it follows that
the meals drag out in length. At any moment of the day one
[415] can see someone eating. The food /364/ is presented to each
one in a calabash or terra-cotta bowl which each holds on his
knees. They pick up the pieces with their fingers but imbibe
liquids with a wooden spoon (Figs. 42 and 43). After eating,
they wash their hands. I have seen some rinse out their mouths.

/364 cont./
273 life of the individual or the community is associated with this
beverage. The divine principle which kãwi has in it does not
take away its secular character; and, while one gets drunk on
it during the festivals, nothing prevents washing down meals
with it at the time when the corn ripens. As a sign of
[574] hospitality every stranger is invited to empty a calabash full
[576] of it; and the compliments he addresses to the wife of his
host fill his heart with pride.

527 The Indians always appreciated the liking I showed
273 /Plate XIV appears here/ /365/ for kãwi, and my old friend
[123] Karnapadyũ did not fail to recall the big vats full to the brim
to persuade one to return to celebrate Easter with them, or,
if you like, the corn harvest, since these two dates coincide
more or less. Such promises /Fig. 29 appears here/ could not
remain without effect, and Karnapadyú was not at all surprised
to see me arrive shortly before the festival.

The greatest animation prevailed in the village of
Carurutí, formerly so calm. Men came and went, bending under
enormous loads of wood. All the urns were lined up in front
of the huts and buried to a third of their height (Plate XIV, 1).
527 For a long time big piles of corn had already been heaped up
273 in the village, which all, big and small, men and women,
243 /Fig. 30 appears here/ were actively engaged in husking.
[412] Some used their fingers, others knives or a pointed stick. Not
[413] one had thought of the so practical instrument used by their
ancestors: a small wooden peg with a leather loop to put two
fingers through. It is curious to note that such a simple object
fell into disuse; an old man still sold me a specimen made
of iron but a close copy, so to speak, of the wooden prototype,
of which it reproduced the smallest details (Fig. 29).

273 Now the hardest work begins: the grinding of the kernels.
Day and night the dry noise of the pestles crushing the corn
[461] resounds in the village. Often, to get the chore over more
quickly, three women group around the same mortar and with
surprising speed raise and pound their pestle without a single
error in rhythm interrupting their laborious work. Once ground,
[415] the corn is sifted in an urumpesa or large-meshed sieve (Fig. 31).
The rather coarse flour is poured into large urns filled with water.

Plate XIV

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1. Vessels assembled in front of a hut and serving for the preparation of kãwi (chicha). Carurutí. (Photo. A. M.)

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2. Women and children taking kàwi. The women are squatting on the ground on skins, while the men are seated on benches or chairs. Sam̃irenda. (Photo. A. M.)

/365 cont./

273 The preparation of chicha is not play: it is necessary not only /366/ to grind an enormous quantity of corn, but again to go

484 ceaselessly to get water, often at a great distance. At Cururutí
482 the nearest potable water was at the bottom of a ravine of particu-
273 larly difficult access. The women were constantly going there with an îru (Plate XVII, 1),[a] which they carried on their backs in a net (añapoka) held on the forehead by a strap. They would fill

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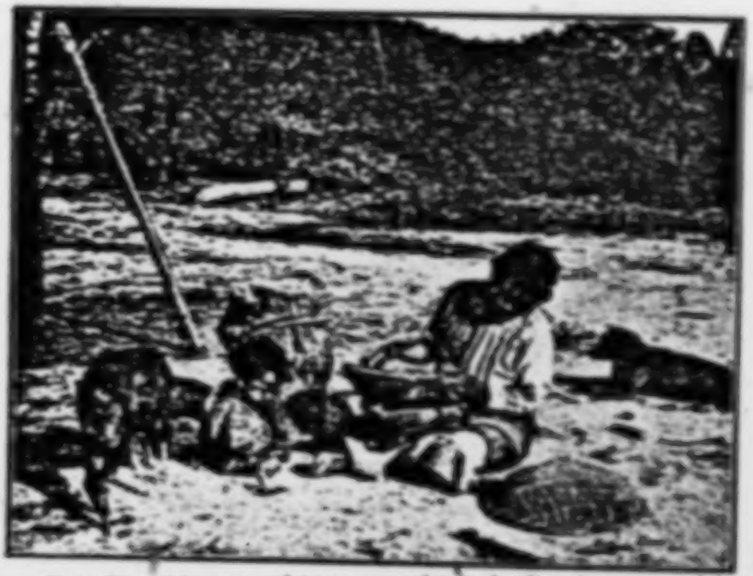


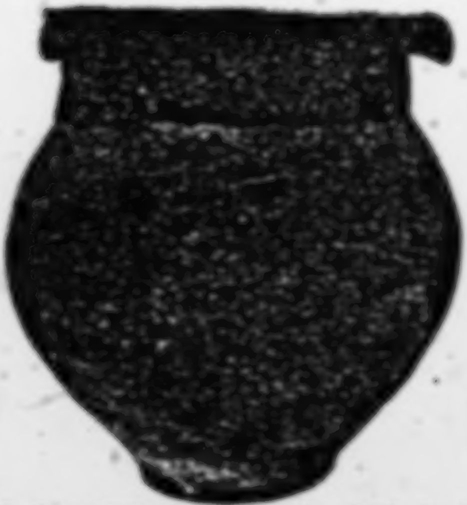
Fig. 31. Woman sifting corn which she has just ground in the mortar beside her. This flour is to be roasted, then chewed to serve as ferment for kïwi.° Carurutí. (Photo. A. M.)

484 the jug and, loading it with difficulty, would go back up the
482 steep slope doubled over under the weight. So as not to lose any
273 time, these hard-working creatures would take along a calabash full of ground corn which they continually chewed.

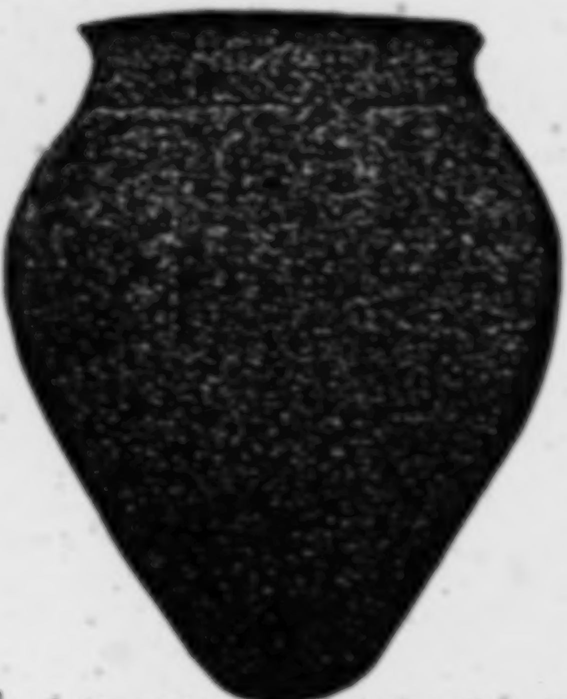
273 The ground corn is cooked in water and constantly stirred
412 with flat sticks whose edges used to be cut out with a certain
[198] artistic care in olden days (Fig. 32). Today a kind of oar (Fig.
[239] 33) or the scapula of an ox (Fig. 34) fastened to a long handle
[531] replaces the ancient utensils in which was manifested so well the Chiriguano tendency to decorate even the most humble objects.

[a] [For plate XVII, See Category 116, P.129--Analyst]

Plate XV



1. Large vessel (yambui) in which the Chiriguano make corn beer ferment. Prov.: Ivu. (1/5 nat. size.)



[764]

2. Large vat (yambui) for boiling kawi. The Chiriguano bury their dead in similar urns. Prov.: Ivu. (1/7 nat. size.)

/369 cont./

293 At Saintrenda on Easter Day I was able to note that the
578 first one served is always the "captain." As before, the
576 vessel full of *kãwi* is put down at his feet. He drinks the first
[554] bumper, then hands his cup or calabash to his neighbor. The latter gives back the calabash empty or fills it and passes it on in his turn. Several calabashes are circulated, but they always come back to the first person who received each one and he finishes it. The men move from their places several times to go to serve the women who, on their part, do not forget themselves and drink according to the same /370/
[533] ritual as the men. The drinking takes place to the sound of flutes and violins.

When the supply of *kãwi* is exhausted in a village, they get in single file and, the music at the head, go elsewhere to revel.

[789] Formerly the preparation of *kãwi* was accompanied by
[198] magic rites. Today nothing is left of this but the custom of
[302] daubing the face and legs with roucou. In certain villages the women do not even take this precaution any more. However, between Caruruti and Caipipendi, I could still see several women stained like this, who seemed "handsome devils," to use an expression dear to Jean de Léry.

● 415 Notes on the Cooking Utensils Used among the Chiriguano

Nothing strikes the traveler who arrives in a Chiriguano village so much as the abundance of pieces of pottery he finds inside or outside the huts. Figure 1 of Plate XIV /see p. 115/ gives an idea /Fig. 35 appears here/ of the number of vessels one can see in a small area at the time when the Indians are preparing corn beer.

Pottery for culinary use among the Chiriguano has a com-
[597] pletely different nature from that for ceremonial days. The
[198] latter is clearly of Andean origin with a few rare Arawak elements, while the former has retained a very marked Guarani character.

/370 cont./

● 415 531 It is distinguished especially by finger impressions, which decorate the neck of nearly all the common pots.

323 While watching the Chiriguano potters work, I realized that the finger impressions which so often decorate their vessels result automatically from the process of fabrication. At the moment when the potter forms the neck of the vessel, she has to press the roll constituting this part between her thumb and index finger and no longer with the flat of the hand as she has done up until then. The vessel is generally too narrow in this zone to allow putting in the whole hand. The result of this is a whole series of finger impressions which vaguely give the effect of ornamentation. Now the potter rubs them out in order to remake them more symmetrically. Thus this motif which adorns most of /Plates XVI and XVII appear here/ /371/ the vessels in common use among the Chiriguano is obtained, so to say mechanically. From the neck these decorations have been extended to the rest of the vessel for an aesthetic purpose, but their occurrence on the upper part influenced the rest.

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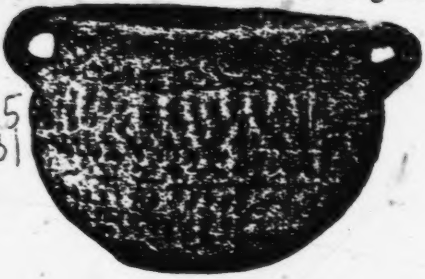

Fig. 35. Small vessel (yapeporai) decorated with fingernail impressions. The lines of contact between the three rolls of clay of which it is composed are still visible. Prov.: Caruruti. (1/3 nat. size.)

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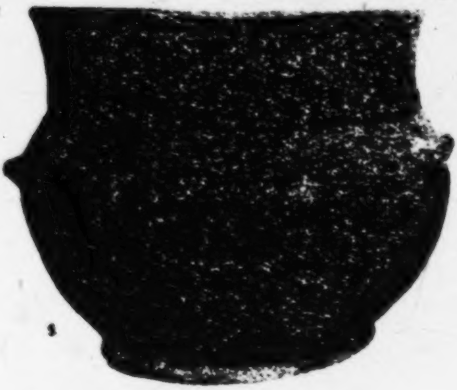
Plate XVI



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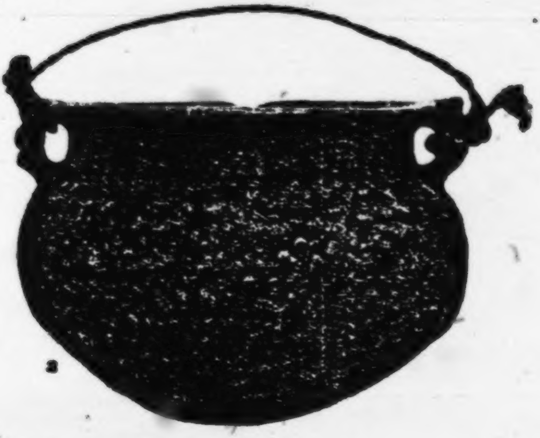

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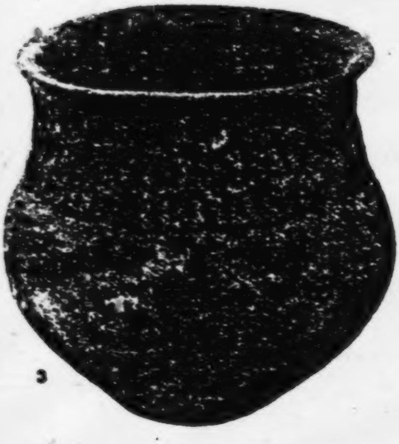

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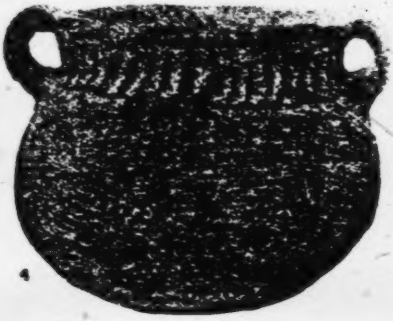

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1. Cooking pot (yapepó). On the neck: fingernail impressions. Prov.: Ivu. (1/3 nat. size)

2. Vessel (yapepó) with twisted handles and decorated with incised triangles. Prov.: Saladito. (1/3 nat. size.)

3. Cooking pot (yapepó) decorated with fingernail impressions. Prov.: Ivu. (1/4 nat. size.)

4. Cooking pot (yapepó) decorated on the neck with fingernail impressions. Prov.: Ivu. (1/3 nat. size.)

Plate XVII

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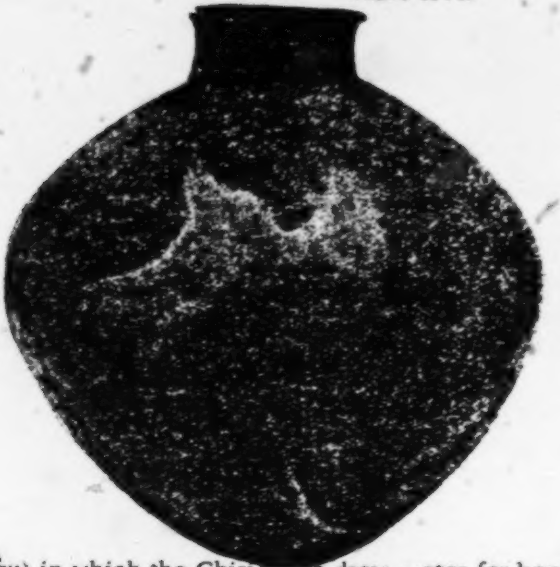
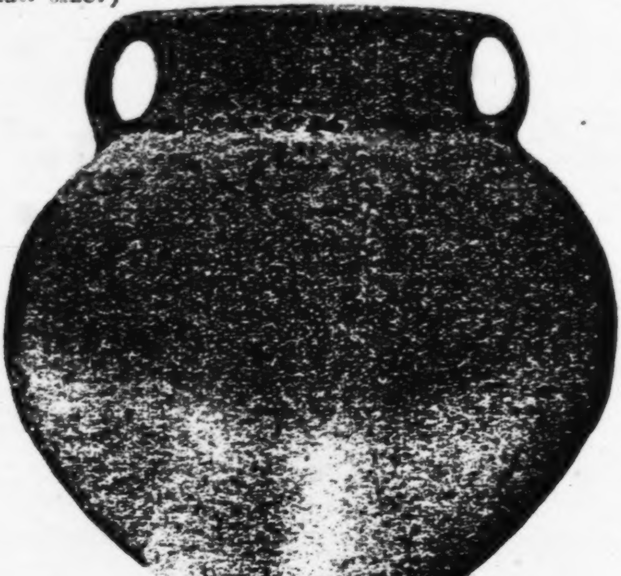


1 Vessel (îru) in which the Chiriguano draw water for household use. This specimen comes from the Chané village of Tuyuntí, near the Aguaray (Salta Chaco, Argentine Republic). The neck is decorated with fingernail impressions. (1/4 nat. size.)



2. Vessel (yambui) decorated with a series of cups /godets/ on the base of the neck. Prov.: Saladito (upper Pilcomayo). (1/4 nat. size.)

C /371 cont./

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The ordinary pots used to cook the food are, as a general rule, decorated all around the neck with several rows of finger or fingernail impressions. The most typical example is the vessel of Plate XVI, 3 /see p. 125/ which typologically can be ranked with the big urns for cooking corn beer, many of which have more or less the same shape.

Ordinarily pots meant to go on the fire are provided with handles (Plate XVI, 2 and 4 and Fig. 36).

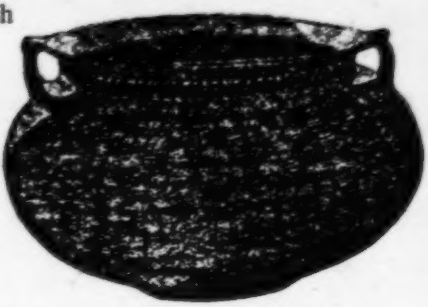

Fig. 36. Vessel (yapepó) with twisted handles and decorated with two series of small depressions imprinted on the neck. Prov.: Yumbía. (1/3 nat. size.)

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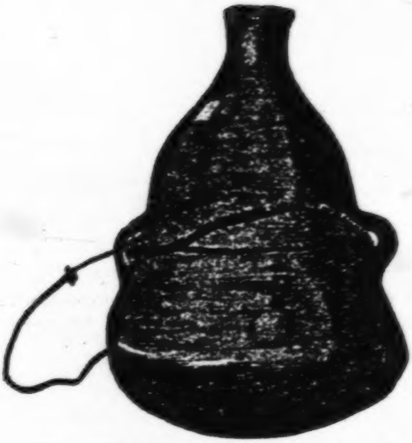


Fig. 37. Toba vessel in the shape of a flattened gourd. Serves for carrying water while traveling. Prov.: Macherotí. (1/3 nat. size.)

/371 cont./

415 531 Certain vessels (Fig. 35) have the exterior surface entirely covered with these depressions obtained by pressure of the thumbnail. The Indians call this decoration *tatupire*, that is "armadillo carapace," /Fig. 37 appears here/ a completely justifiable comparison.

One can consider as an evolution of the process of ornamentation by finger impressions the angles or chevrons which decorate the outside surface of the vessel of Figure 2, Plate XVI /see p. 125/, which have been incised in the soft clay with a pointed instrument. This type of ornamentation can be reduced to its simplest expression; thus on the neck of the vessel of Plate XVII, 2 /see p. 127/ it is limited to a row of little cavities made with a pointed stick. The small vessel of Figure 36 /see p. 128/ with a belly flattened from top to bottom belongs, from the decorative point of view, in the same category.

415 531 171 On another vessel (Plate XVI, 1) the small nipples which project /372/ all around the belly constitute a summary decoration which completes that of the neck formed by fingernail impressions. Pots of this type are found among the Ashluslay (Nordenskiöld, 9, Fig. 65, p. 218).

This decoration is exceptional in South America. Jijon y Caamaño (p. 6) considers it characteristic of the northern part of Ecuador. He points out its distribution in Central America and in the Mound region in the United States.

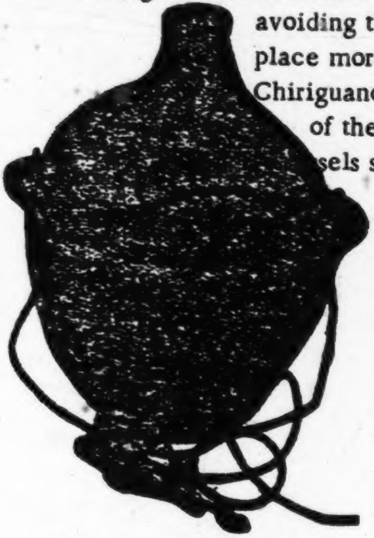
[126] The *îru* of Plate XVIII, Fig. 2 /see p. 131 / has the exact shape of a calabash; this resemblance was intentional, for the Indian woman who sold it to me presented it at the same time as the calabash which /Fig. 38 appears here/ had doubtless served as a model. Vessels which are almost replicas of this specimen have been found at Jachal and Calingasta in San Juan province in Argentina (Ambrosetti, 1, Plate VII, and Debenedetti, 3, Fig. 41, p. 69).

415 [1462] 415 323 The Chiriguano call the vessels in which the women draw the water they need for their households by the Quichua name *îru*. The *îru* are characterized not only by their more or less globular shape and the narrowness of the neck on top, but also by the quality of the paste from which they were

C /372 cont./

323 ● [415] modeled. The latter is extremely fine, of very good quality, and, when fired, forms a compact, hard, and resistant mass. This clay is inherently not very porous; to render it still more impermeable the Chiriguano potters give the vessel a long polishing while it is still unfired but nevertheless very dry. This is applied on the exterior walls of the receptacle and gives them a brilliant and metallic appearance which at first sight would be taken for a glaze. This operation has the effect of making the vessel almost impermeable and thus of avoiding the evaporation which takes place more or less rapidly in most Chiriguano receptacles. The narrowness of the neck at the top of these vessels serves a similar purpose. C 415 →

The îru can be of any size: there are very large ones like the Chané specimen of Plate XVII, 1 /see p. 127/ and other very small ones (Plate XVIII, 4 /see p. 131/) which little girls use to help their mothers and /Plate XVIII appears here/ /373/ become initiated into housework. Vessels 1 and 3 of Plate XVIII represent rather rare close forms, which derive from the primitive type but which have been perfected. The handles with which these îru are provided allow them to be carried on a trip in place of gourds.

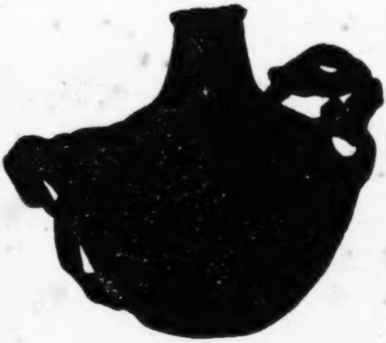


A [415] ←

Fig. 38. Ashluslay vessel.
Prov.: Estero Patiño.
(1/3 nat. size.)

C [172] Prototypes of the Chiriguano îru have been furnished us by Debenedetti's excavations (2, Fig. 119, p. 171) on the Isla de Tilcara.

Plate XVIII



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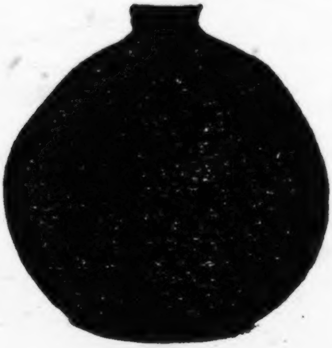

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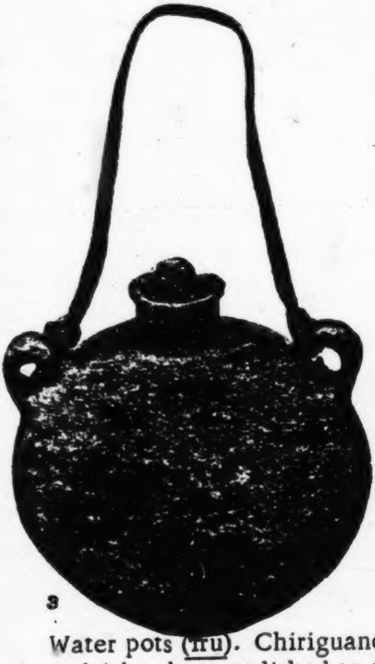

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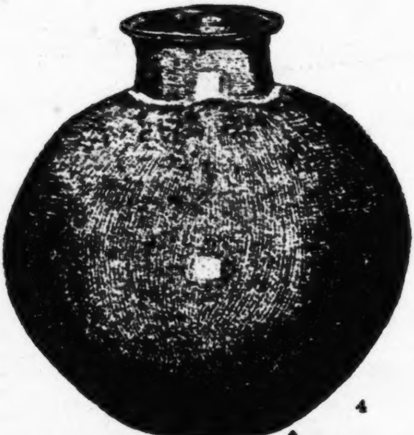

4

Water pots (îru). Chiriguano. The exterior surface of îru Nos. 1, 3, and 4 has been polished to the point of appearing glazed. The îru No. 2 has been modeled in the shape of a calabash. No. 1 comes from Ivu, No. 2 from Carurutí, No. 3 from Yumbía, and No. 4 from Macharetí. (1 and 2 = 1/4; Nos. 3 and 4 = 1/3 nat. size.)

/373 cont./

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Typologically, we must put the vessels of the primitive tribes of the Chaco in the category of the îru. Like the Chiriguano or their forerunners the Chané, the Matako, Toba, Choroti, and Ashluslay copied Andean models, which they adapted to their needs. It is appropriate to note that the seminomadic tribes of the Chaco must have fashioned their vessels in such a way as to be able to take them along with them on their peregrinations, while the Chané and Chiriguano, sedentary nations, did not feel the need to modify the primitive form and kept the Andean prototype without bringing variations to it. For comparison I am reproducing here two vessels from the Chaco: one (Fig. 37) comes from the Toba section of Macharetí, and the other (Fig. 38) from an Ashluslay tribe traveling in northern Argentina.

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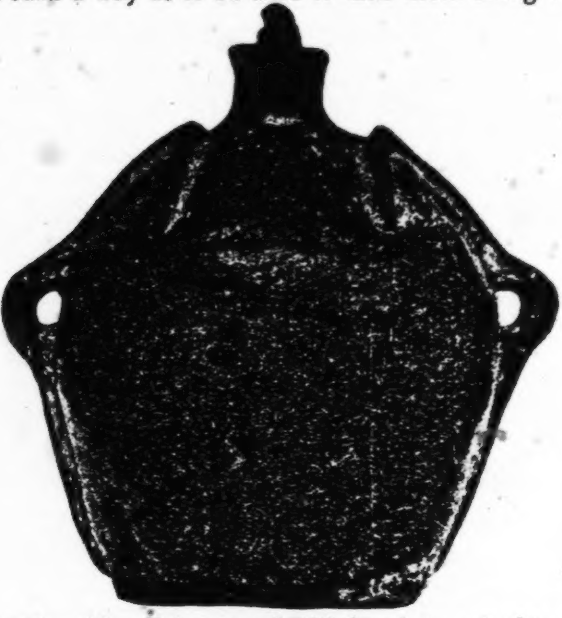

Fig. 39. Toba vessel with bands in relief imitating the suspension cords with which vessels of this type are generally provided. Prov.: Macharetí. (1/4 nat. size ±.)

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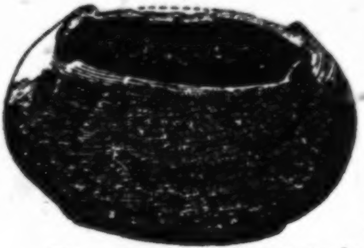
/373 cont./

The handsome vessel of Figure 39 comes from the Macharetí mission. It is /374/ the work of potters of the Toba tribe. Three details make it worthy of a place apart: the very wide, flat base; its almost quadrangular horizontal section, a very rare characteristic in Indian pottery; and, moreover,



● C 415 ←

Fig. 40. Small bowl (ñaè) with 4 nipples. Chiriguano. Prov.: Caipipendí. (2/5 nat. size.)

T 415 531

the two bands which run along the neck, imitating in terra cotta the suspension cords with which Toba vessels are usually provided.

T [482] T [178]

This vessel is a good example of the influence the way of life can have on the art and technique of a tribe. The ancient vessels of the Toba were, as I have just said, always furnished with a suspension cord to make it possible to carry them when traveling. Today the Toba are sedentary and this cord, having become useless, has been transformed into an embellishment.

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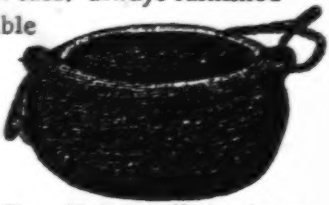


Fig. 41. Small miniature bowl with cord for hanging. Chiriguano. Prov.: Ñawirenda. (1/2 nat. size.)

Bowls

Bowls are not plentiful among the Chiriguano, among whom calabashes replace them to advantage. The ones I have been able to collect, and which were not painted, are made of a clay which, after firing, gives the appearance of being wood. The base is flat and the rather high sides flare out, except in the specimens of Plate XIX, 3, and Figure 40, where they are convex. The latter puco is

/374 cont./

415 surmounted by two nipples, remains of stylized ears. These protuberances can be perforated and allow a suspension cord to pass through, which permits hooking the bowl to a beam of the hut (Fig. 41).

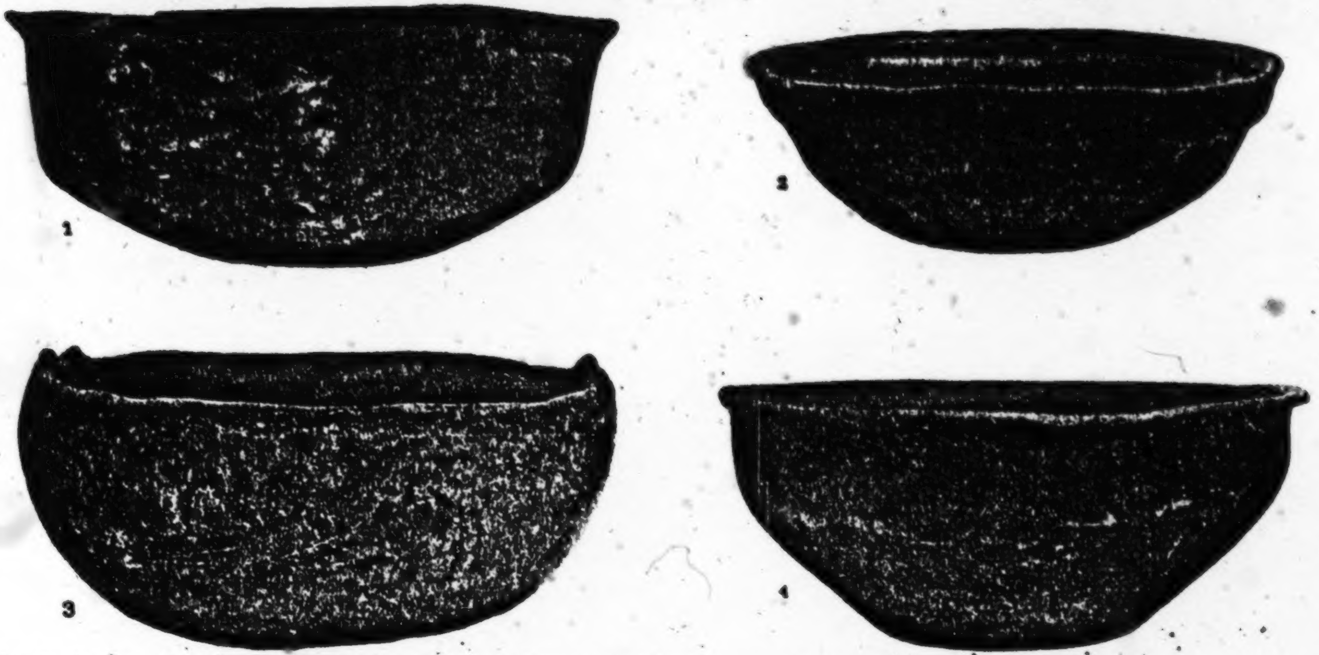
Spoons

412 Spoons are very common among the Chiriguano. Their
171 form connects them closely to those which have been made
172 known to us by the excavations carried out on the Bolivian
altiplano and in northwestern Argentina. It is among the ancient populations of this region that we must seek the origin of this cultural element (on this subject see Nordenskiöld, 9, pp. 91-92), of which the Chiriguano have faithfully kept the primitive aspect and even certain peculiarities such as the indentations of the handle which /Plates XIX-XXI appear here/ /375/ are seen on one of our specimens and on one discovered in the Puna de Jujuy (Pucara de Rinconada) by Boman (2, Vol. II, Plate LIX, Fig. 142).

Beside these spoons, whose use spread under the influence
412 of the civilized peoples of the west, the Chiriguano kept the
237 most rudimentary forms of this utensil: the valves of a fresh-
824 water mollusk (anodonta) (in Chiriguano: inta) are often used
by them to eat liquid dishes; the shell of the fruit of a bignoniacea (?) opened lengthwise also appears in the north of the Chiriguano territory as the survival of a time when spoons were still unknown to them (Fig. 44).

412 Some small calabashes, ovoid or round, with a jutting
peduncle, can, after being cut through the middle, replace
[171] wooden spoons to advantage (Fig. 45). It was in this natural
form that the spoon spread in tropical America where Andean influence did not make itself felt. The Chiriguano do not disdain using these half-calabashes to dip into the bean pot or the meat broth. Calabashes like the one of Figure 46 /see p. 139/ take the place of ladles.

Plate XIX



Bowls (naè). Chiriguano. Bowl No. 1 was found in a funerary urn from Caipipendí. It was originally painted red. Nos. 2 and 4 come from Saladito (upper Pilcomayo); No. 3 from Carurutí. (No. 1 = 1/3; Nos. 2, 4 = 1/3; No. 3 = 2/5 nat. size.)

↑ [764]

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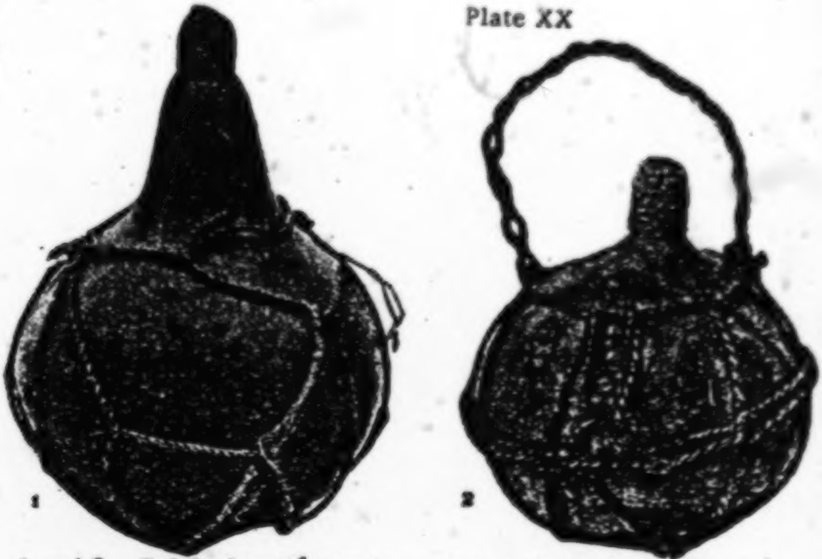
Plate XX



1 and 2. Calabashes (iá) put in a net in order to be transported or hung in the hut. Prov.: Saladito and Ivu. (1/3 nat. size.)

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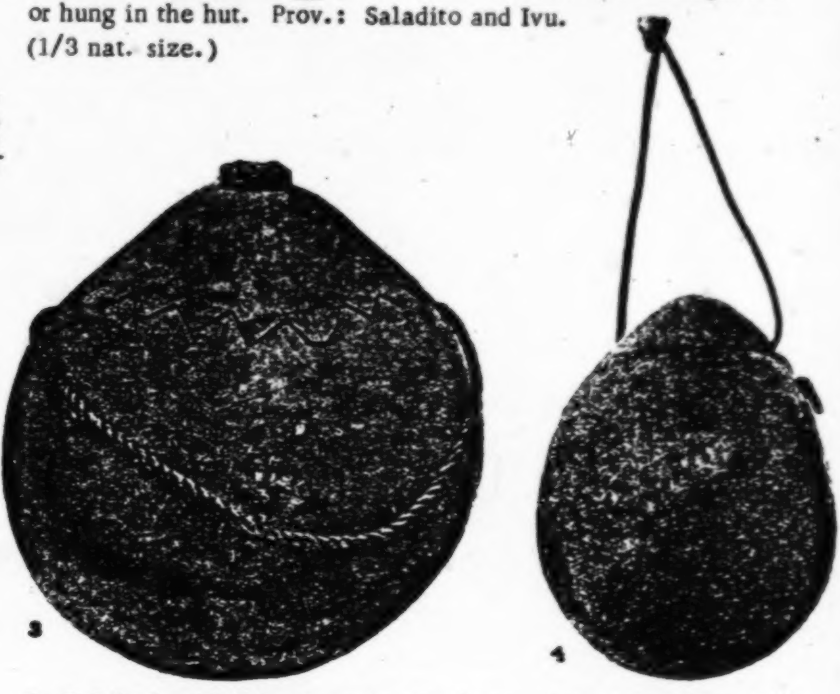

3. Calabash with lid cut out in star shape. Prov.: Saladito. (1/3 nat. size.) 4. Calabash with automatic closing. Prov.: Ivu. (About 2/5 nat. size.)

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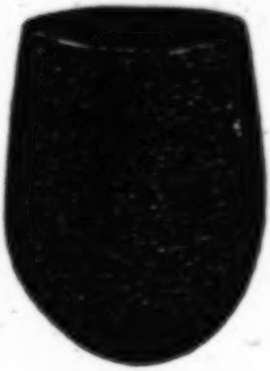
Plate XXI



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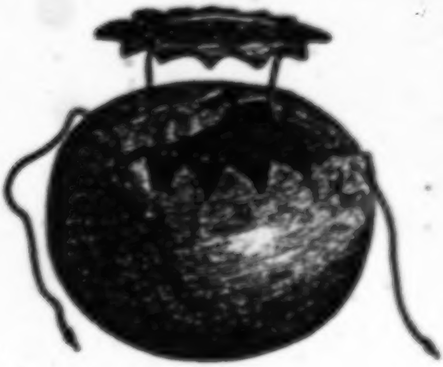

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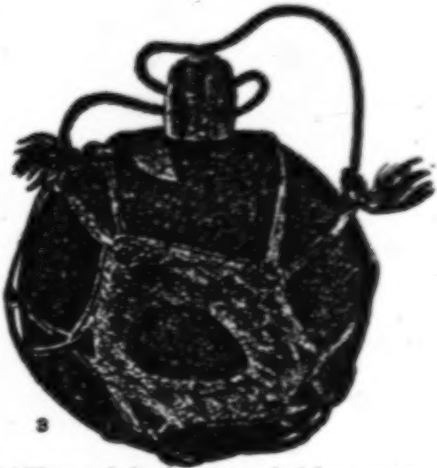
1. Calabash used as a mug. Prov.: Ñawirenda. (1/2 nat. size.)
2. Calabash with star-shaped lid and automatic closing. Prov.: Carurutí. (1/2 nat. size.)



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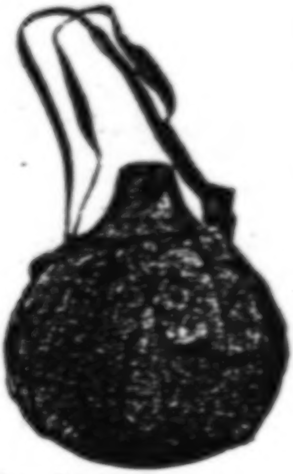

3. Flat calabash suspended by means of lether thongs. Prov.: Tarairi. (2/5 nat. size.)
4. Calabash enclosed in strips of wembé bark. Prov.: Saladito. (1/3 nat. size.)

/375 cont./

Calabashes

● 415 In each Chiriguano village calabashes are as abundant as pottery (see Fig. 47 /see p. 139 /). The huts are full of them. They are of every shape and size, from the spoons we spoke of to the big basins in which the kãwi is distributed on feast days.

[286] The calabashes which are ovoid or gourd-shaped are generally enveloped in a kind of rudimentary net of vegetable fibers or leather thongs, which allows them to be carried in the hand or hung (1). In them is put either water, or grain
415 and seed, or roasted flour, or finally roucou or kalasapa powder saved for feast days (Plate XX, 1 and 2; Plate XXI, 3 and 4).

[322] Some calabashes are provided with a lid which the Indians make by cutting a calotte with star-shaped edges in the still green fruit, and this then forms a hermetic closing. The lid is fastened on by means of a small cord which, when pulled, suffices to close the calabash /376/ (Plate XX, 4 and Plate XXI, 2). Gourds whose opening is small in diameter receive a fragment of a shelled ear of corn as a stopper. /Figs. 42-47 appear here./

[121] Painted, pyrographed, or incised calabashes will be the object of a special study.

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1. Nordenskiöld (10, p. 97) has given the list of the South American tribes who put their calabashes inside a net to carry or hang them. This contrivance is widespread on the continent and its distribution is certainly greater than that indicated by Nordenskiöld, but travelers generally take only slight interest in such details, which are nevertheless important. The Kaingúa of Paraguay encompass their calabashes with wembé bark just like the Chiriguano (see Ambrosetti, 2, p. 716).

/377/

Wooden Bowls and Basins

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● 415 171 439 The Chiriguano also use wooden bowls (Fig. 49). I do not know whether they make them themselves or receive them from the half-breeds of the /Fig. 48 appears here/ San Luis region. In this latter case the Chiriguano of the San Luis (Entre-Rios) region would be the only ones to make them. In Tarija /Figs. 49-50 appear here / where these bowls are much sought after by the half-breeds, they were indicated to me as coming from that zone. The rare wooden bowls which /378/ I saw at Caipipendí had been bought by the Chiriguano in the course of their trips. The same origin must be attributed to the wooden troughs found among the Chiriguano who live near the Quichua half-breeds of Tarija department. These basins are used for washing food and also as bathtubs. (Ci 415 177) The Choroti have wooden dishes (Nordenskiöld, 9, Fig. 20, p. 88) which have a shape very similar to that of the trough reproduced here (Fig. 50) and which doubtless were introduced among them either by the ancient Quichua or by the half-breeds. (A 415 171) Among the Araucan of Argentina wooden basins are found, which are similar in every detail to those of the Indians and half-breeds of Bolivia and the specimen pictured here.

Chapter V

Tools of the Chiriguano

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412 178 [177] The work tools the Chiriguano use nowadays are almost all of European manufacture. Here and there the ancient forms were kept when stone or bone were replaced by iron. Witness the adze of Plate XXII /see p.143 / which constitutes a curious survival of the eared or T-shaped ax certainly adopted by the Chiriguano after their migration and their establishment at the foot of the Andes. (T-G [412] [184]) This type of ax is unknown to me from any other Tupi-Guarani tribe and is rare in the area occupied by the different nations belonging to this linguistic family (see Rivet, 1, pp. 149-155).

Modern Quechua SE24

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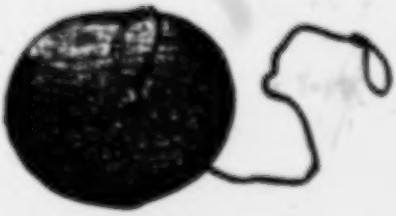

Fig. 48. Calabash hung by means of a transverse stick. Prov.: Ivu. (1/3 nat. size.)

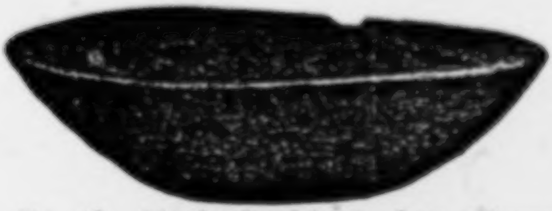

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Fig. 49. Wooden bowl (sua). Prov.: Caruruti. (1/3 nat. size.)

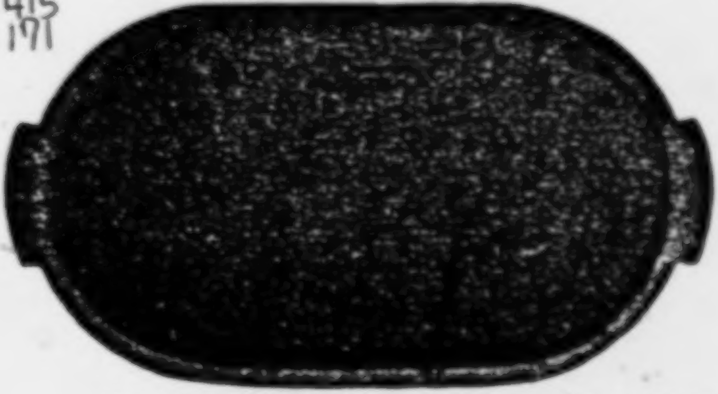

Fig. 50. Wooden basin in use among the Quichua Indians and half-breeds of the department of Tarija (Bolivia) and sometimes also among the Chiriguano.

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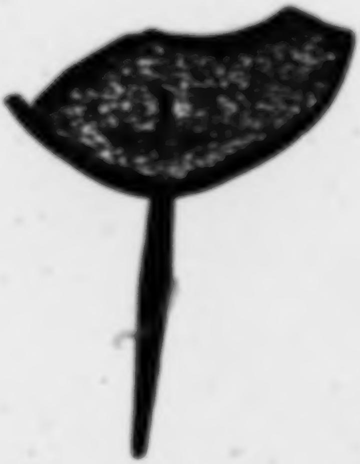

Fig. 53. Mold for making tin labrets (*tembetayapua*). Prov.: Yumbía. (1/2 nat. size.)

Mold for Tembetas

301 303 415 325 The *tembeta*, or labrets, of the Chiriguano are of tin.
They make them themselves with the aid of the mold pictured
here (Fig. 53). It is a calabash into which the fins of the
labret have been hollowed out, while the thicker central part
of the ornament corresponds to the end of a stick going through
[531] [439] the calabash. The cavity produced in the central part of the
labret is then filled with wax into which glass or turquoise beads
are incrusted. These come from ancient burial-places and are
sold to the Chiriguano by the half-breeds of Tarija.

Balances

296 177 171 The Chiriguano of the upper Pilcomayo and the Igüembé valley prize coca quite as much as the Quichua of the altiplano. Besides, it is from them that they got this vice. The fact is known and does not need to be demonstrated. This custom

/383 cont./

323 Chiriguano woman will never be seen making one single vessel at a time: since before continuing she must wait until each one of the parts making up the piece of pottery is dry, she occupies this interval by beginning another vessel, which will dry while she works on the first one again.

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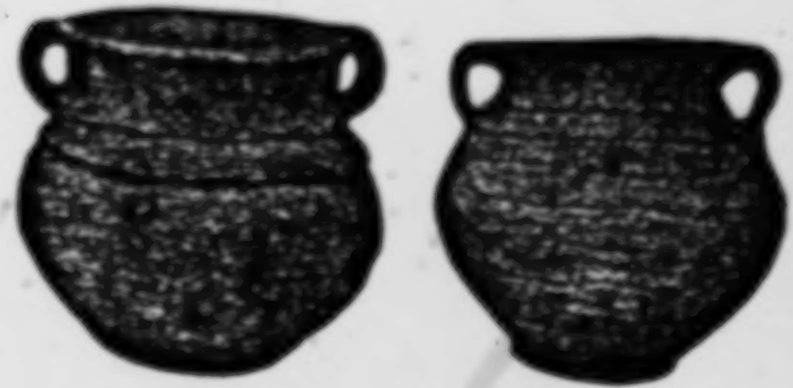

Figs. 57-58. Vessels (yapepó). The rolls of clay of which they are composed are still apparent and constitute a rudimentary ornamentation. No. 57 comes from Caruruti. No. 58 from Yacuiba. (1/4 nat. size.)

323 /384/ When she judges that the bottom has taken on some firmness, she rolls between her hands a roll to which she tries to give a regular diameter. Then she applies it on the base, forming a perfect circle. She cuts off the part which extends beyond the junction point. Next she flattens the roll with her hand, the compression being made from inside to outside, with the back of the left hand and the right palm. When the whole periphery has thus been raised, she evens off the edge, filling all the depressions with pieces [324] of wet earth. Then she smooths the outside of the vessel with a [412] stripped ear of corn and a splinter of bamboo. These two instruments are placed beside her and frequently dipped in water so that the earth [237] does not stick to them. The inside surfaces are polished with the valve of a shell (anodonta) (Plate XXIV, 5). The raw clay, once it is shaped, is supple and resistant like leather. Vessels can be

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323 The paintings on some vessels produce a particularly successful /387/ effect, thanks to the alternation of brilliant.

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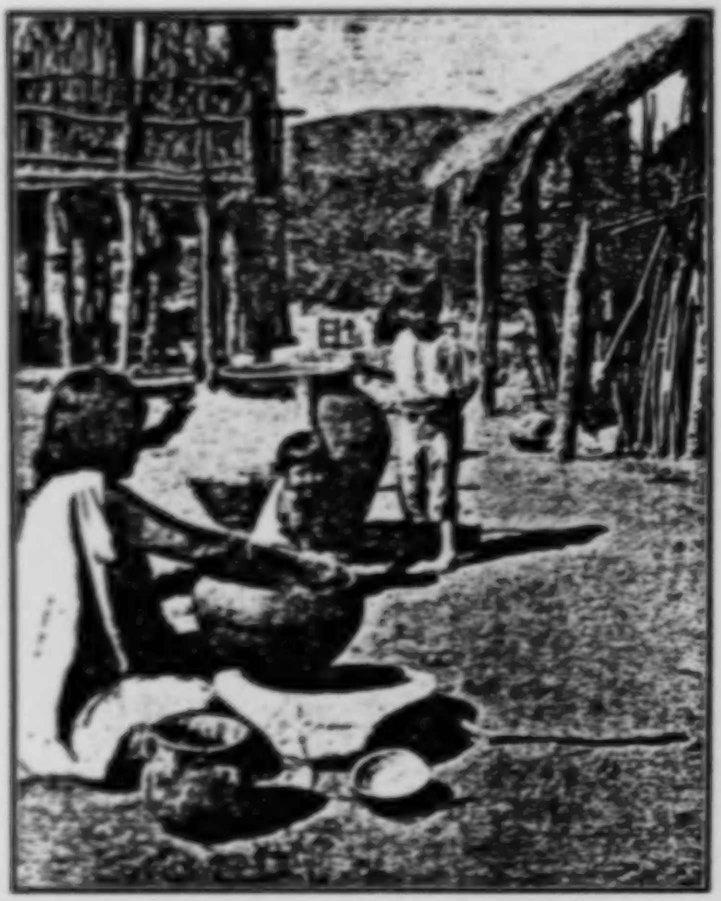

Fig. 59. Fabrication of a vessel: the inside surface is polished after being flattened with the hand.

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[386] solid red with black of the same nature. The first of these colors is taken from the famous roucou, whose oily paste is mixed with resin, kneaded into a loaf, and melted on the hot walls of the vessel.

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386 The name tarawirisi is also given by the Chiriguano to objects resembling loaves of bread kneaded by hand which are composed of a resinous material mixed with wax. According to the explanations given me by the Indians themselves, this

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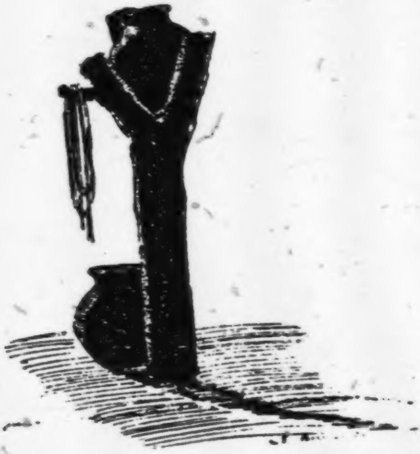

Fig. 60. Forked tree-trunk serving as a shelf for putting vessels on. (After a sketch by the author.)

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386 substance is taken from a mimosa. After being sprinkled with boiling water, it is kneaded and dried in the sun. Its color is yellow or red, but after firing it becomes black.

I could not learn whether this black glaze was applied over a layer of black paint or spread directly on the walls of the vessel. In every case the designs made by this process are much less regular than the ones drawn with a brush.

C
[126] My collections of pottery, which consist of nearly 200 pieces, do not contain any glazed specimen. Nordenskiöld (0 p. 144) assures us that the Chiriguano and the Chané of the Parapití coat their yambui with a sort of gum called tarawisi, a word which, except for one syllable, is the same as the one designating the resinous substance we have just been considering.

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This makes me think that glazing implies a technical process analogous to the one in use on the upper Pilcomayo.

Ce C.I 323 The Chaco Indians draw crude decorations on their vessels with *palo santo* resin, which they apply after firing. According to Nordenskiöld (*id. supra*), the Chané of the Itiyuro probably use the same method to decorate some of their vessels with black designs.

C 323 After being painted, the vessel is put in the shade to dry for several days. It is only when the sides have acquired a certain hardness that the firing process is begun. The vessels are then taken to a spot where there is plenty of dead wood. A large quantity is collected, with which the vessels are covered from bottom to top. Generally, long pieces of bark are selected, which burn brightly.

They set fire to this pyramid of wood and, with a long pole, the /388/ potter watches to see that no brand burns directly against the walls, which would bring on a "shot of fire." When she ascertains that a vessel gives a metallic sound on being touched, she scatters the firebrands with her pole and, by rolling it, makes it go out of the fire.

It may happen that in the course of the firing a vessel may suffer some cracking. This is remedied by taking a little moist earth mixed with dung and applying it on the split while the vase is still hot. The fissure closes, but remains noticeable.

Classification of Chiriguano Pottery

● C 415 The figures which illustrate this text, the plates published by Nordenskiöld (10, pp. 155-162), and the diagram of Outes (3) give a better idea of the more common forms of this pottery than any description. However, a few remarks are called for.

C [184] Vessels with a subglobular belly surmounted by a low, wide neck flaring at the top constitute, without doubt, the most widespread type. (Plates XXXV-LVII.)

/388 cont./

415 184 The footed bowl or "compote" (Fig. 72) comes from the Caipipendí valley, the same as the vessel with ribbed belly of Plate XXVI, 2. These are the only specimens of this type that I found in the whole Chiriguano country.

415 184 532 Anthropomorphic or zoomorphic vessels are rare. Scarcely anywhere but in the Caipipendí valley is corn beer ordinarily served you in vessels shaped like a bull. Besides, their workmanship is careless. The admirable anthropomorphic vessel of Plate XXVI, 1 is an exceptional piece.

415 Twinned vessels (Plate XXVII, 3) and those which a constriction separates into two bodies (Figs. 74, 75, and Plate XXVII, 1) are very rare.

415 531 The motifs painted on Chiriguano vessels most often are of a purely geometric nature.

There are few exceptions to this rule. As an example of them, I shall give the large yambuí of Plate LII, 1, on the belly of which have been painted more or less stylized dogs, chickens, and toads; the yambuí of Figure 83, whose principal decoration is composed of a series of yakú (pavo del monte /wild turkey/, Penelope spec.); and finally several vessels in my collections, which I did not want to publish because of their completely Europeanized form. On one of them silhouettes of nandus are distinguishable (Plate XXXIV, Fig. 222) and on another have been drawn a man and woman whose hands are united by a red line (symbol of marriage, of love?).

I remember having seen on a jar in the Caipipendí valley /389/ nandus drawn with particular skill. I would gladly have bought that piece if it had been possible to arrange its transportation.

[178] The vessel of Figure 83[1] gives an excellent idea of what Chiriguano potters could do in the "realistic" genre if a long /Fig. 61 appears here/ tradition did not oblige them to limit themselves to the representation of geometric motifs.

[1] [See P. 249, Category 116--Analyst]

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● 415 531 The plant kingdom hardly inspires Chiriguano artists. The vessel of Plate LII, Fig. 3, is the only one whose decoration is clearly phytomorphic; and again in this case I am not sure that

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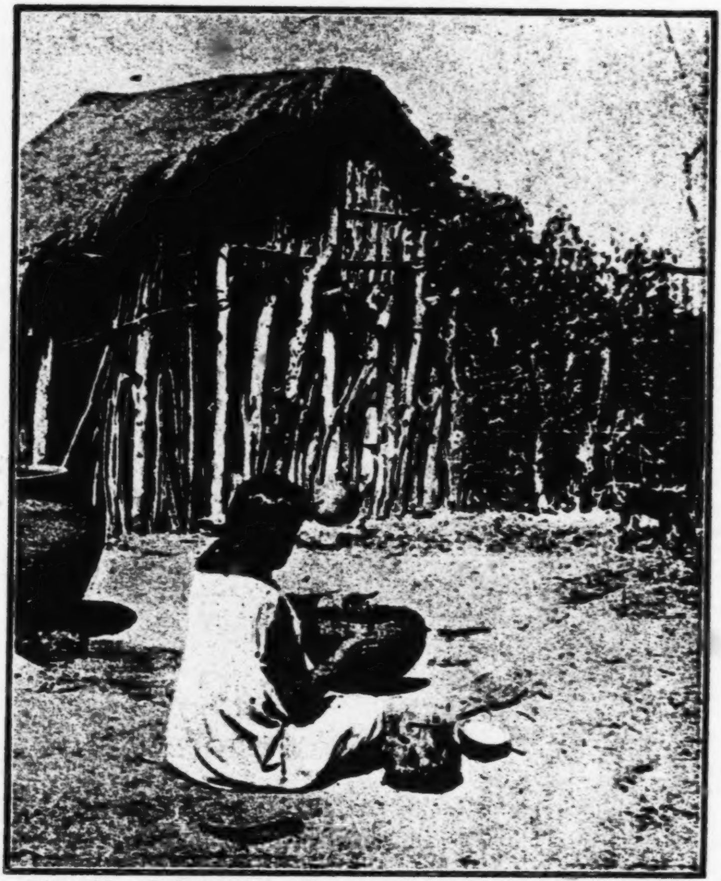

Fig. 61. Fabrication of a vessel: the exterior surface is smoothed with a chip of bamboo after being flattened with the hand.

415 531 a European model did not serve as an intermediary between nature and the picture the potter portrayed.

[126] [179] /390/ Among the 200 vessels I collected in Chiriguano country there is not one that includes a figuration of the human face, with the exception of the one to which I have alluded, whose form betrays the desire to satisfy the stupid puerility of The tourists.

/390 cont./

000 Ce the tourists. In this respect Nordenskiöld (10, Fig. 28, p. 137)
415 was more fortunate than I: among the Chané of the Parapití
531 he was able to acquire a pot on which one distinguishes a nose
177 in relief and the organs of the face painted in a conventional
532 fashion, but in which the Andean influence is clearly reflected.

C Each region, often even each village, has its special
531 style, and this varies again according to the fancy or skill
● 415 of each potter. The differences are often sufficiently accentuated
184 to permit an ethnographer with some experience to recognize the provenance of each piece at first glance.

From the point of view of decorative style, the Chiriguano country is divided into three zones, whose characteristics are the following:

On the upper Pilcomayo the fundamental element of decoration is the spiral in the form of a [illegible]uchant S which is combined with the volute of another color taking off from the apex of a triangle (see, for example: Plate XXXV; XXXVI, 1; XXXVII, 2; Plates XLVII-L, etc. /see pp. 211 ff. and pp. 226 ff./

This motif is arranged in parallel zones framed by geometric figures (festooned lines, alternate triangles, barbed strokes, etc. (see, for example: Plate XXXVII, 1 /see p. 213/; Plate XXXIX, 2, /see p. 215 /; Plate XL, 2 /see p. 216 /; Plate XLIV, 2 /see p. 220/. Rare are the pieces of this zone whose principal decoration does not consist of variously combined spirals. The style of the pottery I collected in the Igüembé valley differs only a little from that of the upper Pilcomayo: we find the same principal elements without, however, the spiral playing a predominant role (Plate XXXIX, 1; Plate XLI; Plate XLII, 2; XLVIII, 4; Plate LI, 1-3; LIV, 2).

C The pottery made by the Chiriguano of the Ivu,
531 Macharetí, and Tarairí missions and by the Chané of the
415 Itiyuro reveals a special predilection for linear motifs stand-
184 ing out in black against a yellowish background. These are
Ce 531 ascending and descending lines which run around the belly of
415 the vessel forming large triangles, and something of a kind,
which, in turn, end in Greek frets or spirals. The triangle

Chané SF8

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surmounted by a volute is a motif which appears often in this region. Triangles with a solid surface combine to form either denticulate bands or somewhat hourglass-shaped figures whose effect is pleasing to the eye (Plate XXXIX, 1: Plate XL, 2; Plate XLI; Plate XLII, 1; Plate XLIII, 1; Plate LII; Plate LIV, 1 and 3-4; LVII, 3-4; LV, 1 and 3, etc.).

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Between the Chané vessels (Plate XXXVIII, 1; Plate LIII, 1-3) and the Chiriguano ones in the missions there are some differences which have less to do with the choice of motifs than with the manner in which they are treated. The Chané women have a purer taste and they evince greater sureness /391/ of hand than the Chiriguano potters. One senses clearly that the latter are only their pupils.

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It is difficult for me to say what decorative style might have been in vogue in former times in the Caipipendí valley (Plate LVII, 2; Plate LX, 4; and Fig. 72). Painted vessels have become rare there, and the few examples I saw or acquired were in very bad condition. As elsewhere, they were covered with geometric figures: broken lines, triangles, /Fig. 62 appears here/ festooned bands, etc. The individuality of Caipipendí pottery shows itself more in the form of some vessels than in their decoration.

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Since I could not visit the Chané of the lower Parapití, I have no idea of the characteristics of their pottery. Nordenskiöld (10, p. 144), who was more favored than I, declares that their pottery presents only a few traces of Andean influence, and he explains this fact by their isolation and poverty.

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If now, instead of style, that is, the combination of motifs, we consider the latter in themselves, /392/ a feeling of unity will succeed our feeling of diversity. The same identical designs are repeated over the whole of Chiriguano territory, and only their relative frequency in a given area and the importance attributed to them to the exclusion of the others create these distinctions of style which I have tried /Fig. 63 appears here/ to define. Nevertheless, there are some decorative elements which are limited to a certain region: the spiral is

/392 cont./

531 peculiar to the villages of the upper Pilcomayo and the Igüembé
184 valley. The decoration made up of broken and asymmetric lines does not go beyond the zone of the Franciscan missions and the Itiyuro region.

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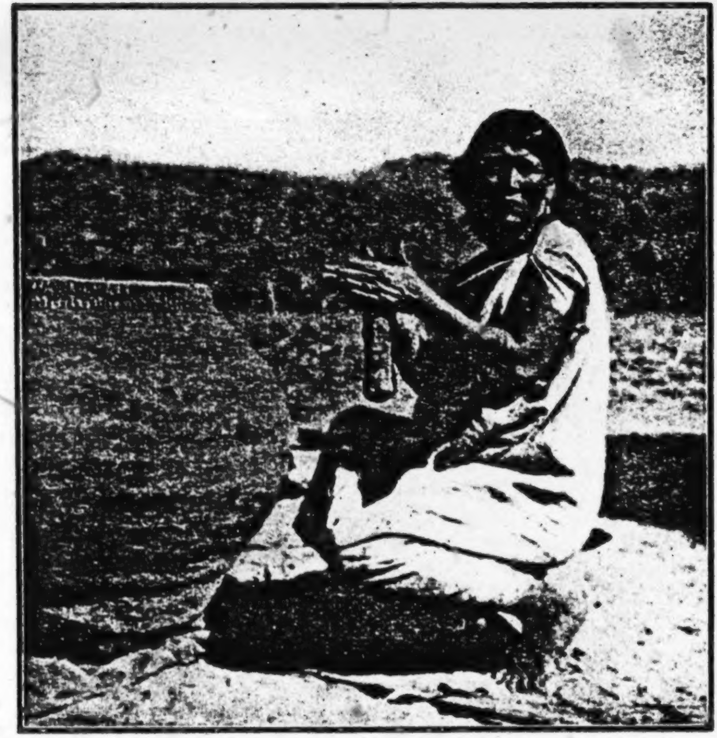

Fig. 62. Fabrication of a large vat: the roll of clay is rolled between the palms of the hands. (Photographs taken by the author at Masaví, Igüembé Valley.)

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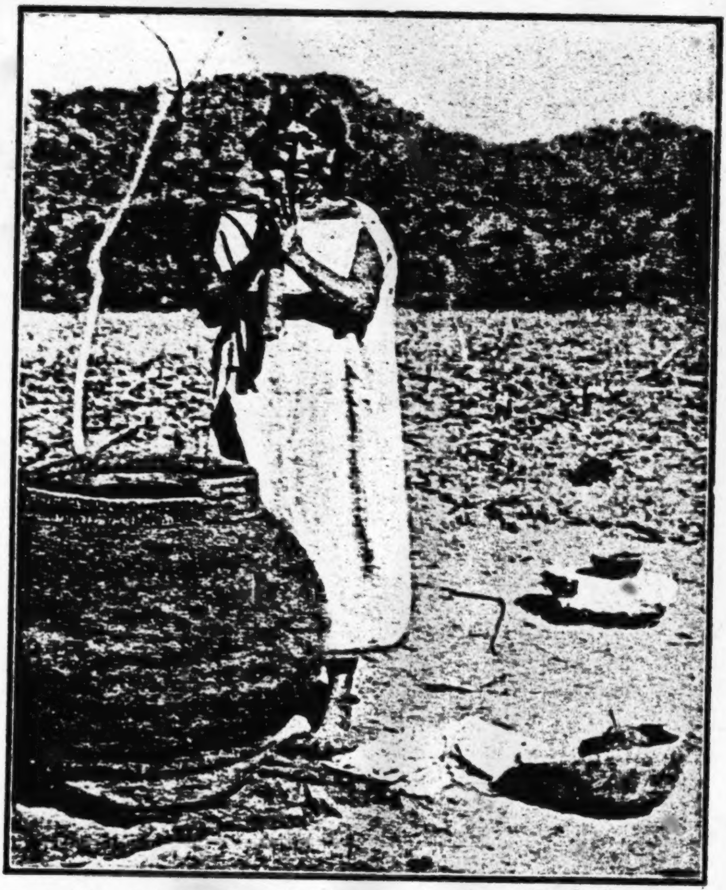

Fig. 63. Fabrication of a large vat: the roll of clay is ready to be superposed on the preceding one.

/393/

Decline of the Art of Pottery among the Chiriguano

323 Of all the Chiriguano industries the most threatened one
178 is doubtless ceramics. The Chiriguano can claim the glory of
415 having been until recently the last Indians of South America
/Fig. 64 appears here/ to have a pottery which deserved to be
included in the number of beautiful manifestations of this art,
so brilliantly represented in certain regions of the continent.
Today things have changed a great deal. Villages in which
one can still find women capable of decorating vessels with
the mastery of former days have become rare and are limited
415 to a restricted area. /394/ It was in the tolderías of the Timboy,
126 the Great Salado and the Little Salado, in the region of Yumbía
178 and in the Igüembé valley (upper Pilcomayo, departments of
Tarija and Chuquisaca) that I was able to collect the finest
specimens in my collection. Elsewhere it was exceptional
/Fig. 65 appears here/ /see p. 166/ to be lucky enough to lay
my hands on a fine piece; and, if I did have this luck several
times, it was almost always a question of an old vessel pre-
[797] served as if by a miracle. The Franciscan missions which
formerly gave Nordenskiöld and Holmberg such fine specimens
797 contributed less toward enriching my collections. Nothing ex-
323 presses the sad state of decline of the Chiriguano better than
415 what I /395/ could observe in the Macharetí mission. After
178 going through nearly all the huts of this large village, which in
[162] normal times has close to 2,000 inhabitants, I could scarcely
acquire five or six yambuí having some artistic value. There
[463] were no longer more than three or four women who still knew
how to hold a brush and they had to /Fig. 66 appears here/ /see
p. 167/ provide for almost the whole village. In a few years
the ancient painted pottery will exist only in memory in the
large village where the famous "Captain" Mandepona lived.

323 This decline has several causes. The first is the state of
415 profound demoralization in which the Chiriguano are found, the
178 total disorganization of their social life, and the increasing
177 influence of the white men, followed by its corruptive effects:
finally, the introduction of manufactured products, first and
foremost gasoline cans.

/396/

000 first and foremost gasoline cans. Artistic ceramics have become the
323 appanage of a few old women who are not founding a school and who
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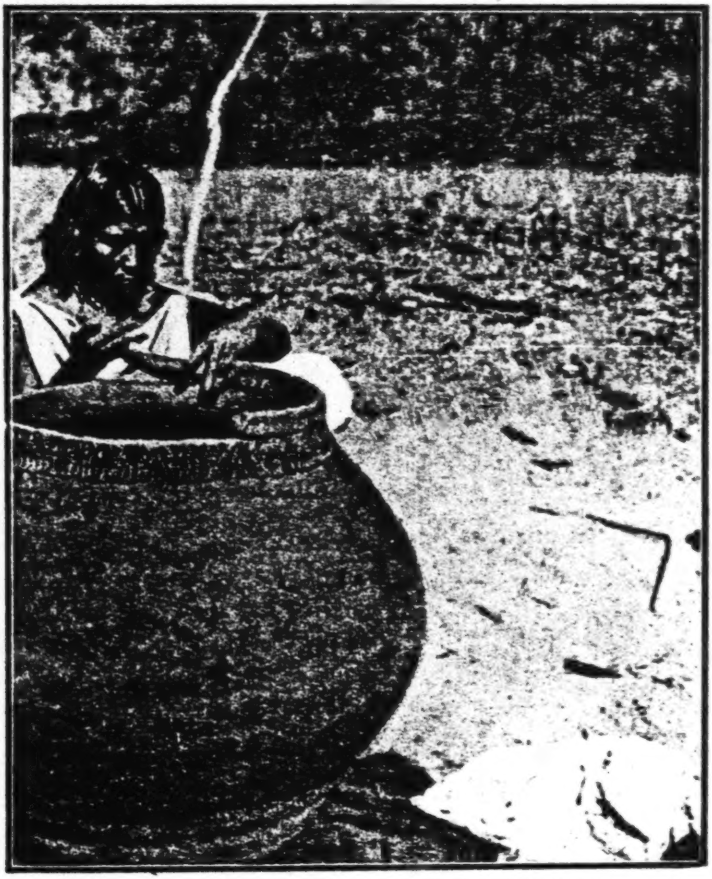

Fig. 64. Fabrication of a large vat: the roll of clay is placed on the preceding one and flattened between the thumb and the other fingers of the potter. Finger impressions result from this, forming a crude design. [531]

323 will carry the secret of their art to the grave. Already today,
178 obliged to satisfy a large demand, they endlessly repeat the same
463 motifs and have a vexing tendency to draw them hastily and
887 without any care at all. These designs are becoming awkward,
531 crude, and are taking on a primitive appearance which is far from
corresponding to the taste and culture of the Chiriguano.

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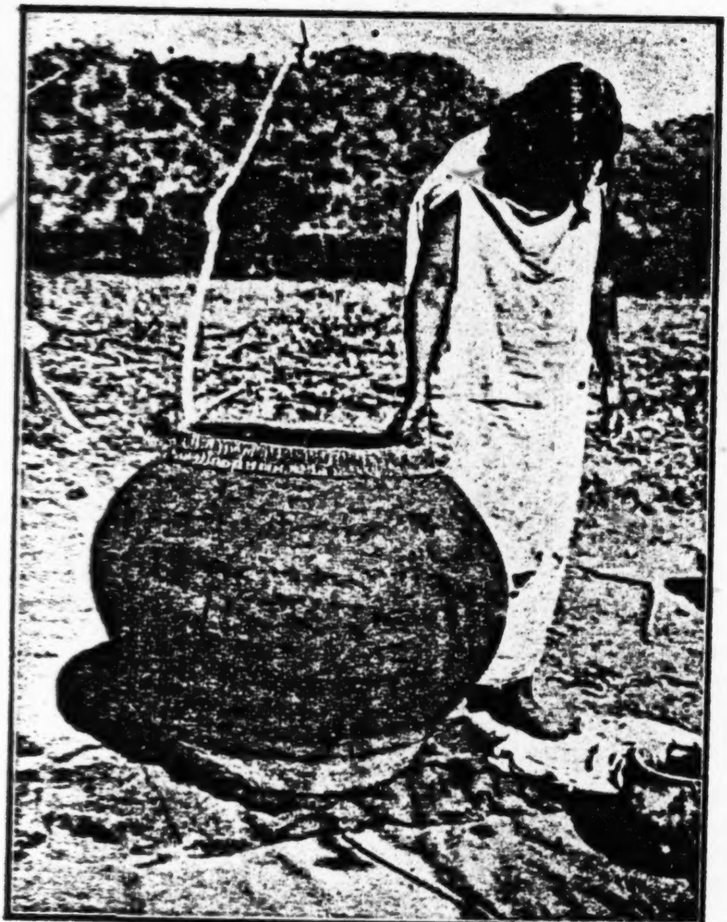

Fig. 65. Fabrication of a large vat: the potter impresses her thumbnail into the still soft clay to obtain a regular design.

463 In some villages there are no more potters. The inhabitants
323 of the toldería of Ibopeytí, for example, have to import the painted
178 vessels they need to celebrate festivals. When I wanted to acquire
439 them, it was generally objected that they had been bought and often
[126] at a very high price. "You go away and leave us without vessels,"
[123] they often used to say to me as a half-joking, half-sad good-by after
my raids.

/396 cont./

323 Without wishing to pass as a prophet, I think I can
178 assign five years of life to the artistic pottery of the Chiriguano. Already it is becoming difficult to make collections of it, at least collections having aesthetic value.

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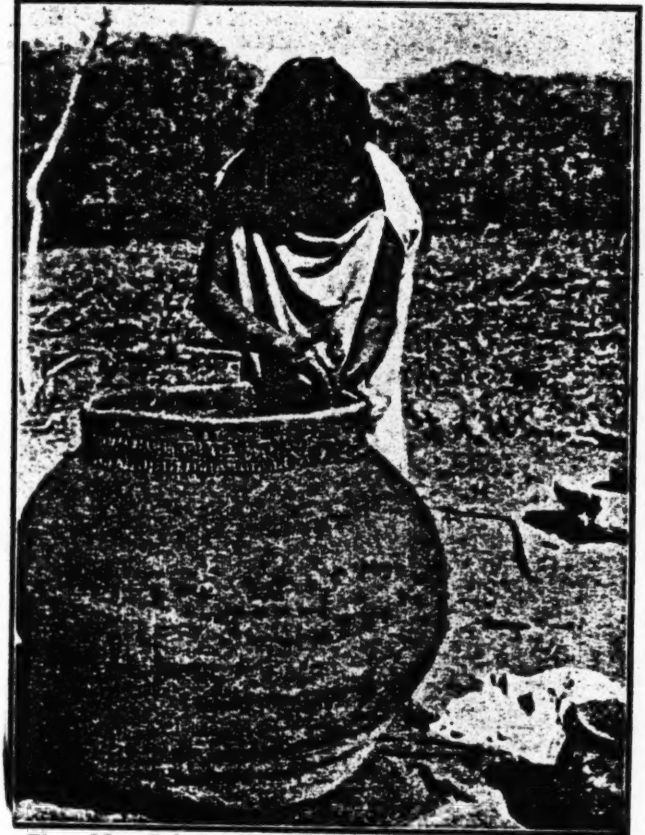

Fig. 66. Fabrication of a large vat: when dry, the clay is polished with a well-polished stone. The purpose of this operation is to avoid all porosity in the surface of the vessel.

415 The state of decline and regression in which Chiriguano
178 pottery is found explains perhaps the decided differences
184 often existing in the pottery of the various regions inhabited
323 by the Chiriguano. Artists being few, it is not surprising that their output varies little and that, because of this, the vessels of one village are all very much alike.

C /396 cont./

323 In former times when artists were not lacking, the num-
●415 ber of motifs used within each group must have been larger,
178 and in this variety was doubtless found many an element which
184 today seems to have disappeared, only to be met in another
zone. It is probable that an ethnographer who might have made a collection among the Chiriguano a century ago would have established a classification other than the one I have tried to outline here.

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Comparative Study of the Basic Elements of the Painted Pottery of the Chiriguano and Chané Indians

1. The Problem of the Chincha Atacama Civilization

The pottery of the Chiriguano and Chané Indians shows such strong affinities with that of the ancient Andean populations from the point of view of form as well as decoration that their relationship cannot be doubted.

These analogies are especially striking among certain pieces /397/ of pottery dug up in the Quebrada de Humahuaca and the ones still made by Chiriguano or Chané women. With an interval of four centuries the resemblance between the pottery of these two regions is still so pronounced that it had attracted the attention of Mr. Debenedetti (2, pp. 134, 149, note 1, and 156), even though he apparently had for his whole basis of comparison only a few rare pieces of very simple Chiriguano pottery collected in the Chaco and of such uncertain provenance that one of them was attributed to the Choroti. The latter in reality, have pottery of an entirely different type, although also influenced by the Andean civilization.

O The affinities of Chiriguano pottery with certain pottery
C of the Quebrada de Humahuaca have been scientifically estab-
Ce lished by Nordenskiöld (10, p. 143). This scholar explains
[648] these surprising similarities very naturally by the influence the
[439] Indians of the Humahuaca region had on their immediate
neighbors, the Chané or Chiriguano, and by the trade relations these peoples maintained.

Chane SF8
Omaguaca SI9

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ce /397 cont./
415 these peoples maintained. These relations between Chiriguano
17 648 and Humahuaca Indians are historically attested to. At the
0 time of the uprisings which took place during the period of the
[648] Spanish conquest, Humahuaca and Chiriguano united to resist
the common enemy (see Boman, 2, Vol. I, p. 77).

The yambuí and yapepo, of which I made a good collection in the upper Pilcomayo region, provide new evidence, even more conclusive, of this striking parallelism which appears between the pottery of the modern Chiriguano and the prehistoric populations of northern Argentina. To allow a direct influence of the Humahuaca Indians on the ancestors of the present-day Chiriguano living on the upper course of the Pilcomayo in the departments of Tarija and Chuquisaca would be a point of view difficult to defend. The radiance of the culture of the Quebrada de Humahuaca could have affected only the southern Chiriguano and the Chané of the Itiyuro. As for the hypothesis which would make of the Chiriguano the precursors of this culture, it is so absurd, so contrary to all good sense, that we cannot envisage it here. At the spot where the Pilcomayo gets ready to leave the valley that it digs across the Andean spurs to spread out in the Chaco plain, the Chiriguano had Chicha Indians as immediate neighbors whose territory extended to the north of the Quebrada de Humahuaca in the south of present-day Bolivia. It was they who transmitted the special forms of their pottery and its principal decorative elements to the Chané, who in turn left them to their successors and conquerors, the Chiriguano. Perhaps the Chané have not everywhere been the inevitable intermediaries between the two cultures; in many cases, Chicha groups must have communicated directly to the Guarani invaders the principal products of their industrial techniques and of their arts.

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175 /398/ We know from 16th and 17th century documents
721 that the Chiriguano constantly made forays into Chicha terri-
727 tory, that they raided their villages, made them pay tribute,
648 and carried away groups of these Indians into slavery, as they
ce 648 did with the Chané. These direct contacts between the
Chiriguano and their western neighbors must have contributed
c 17 greatly to the spread of Andean civilization among them, and

Plate XXV

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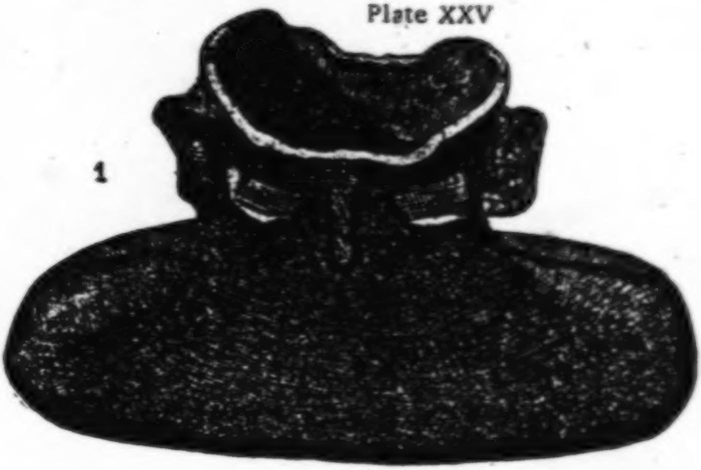

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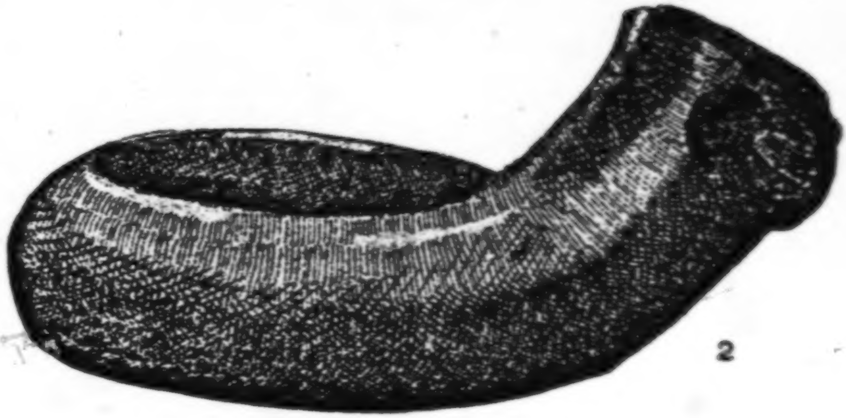

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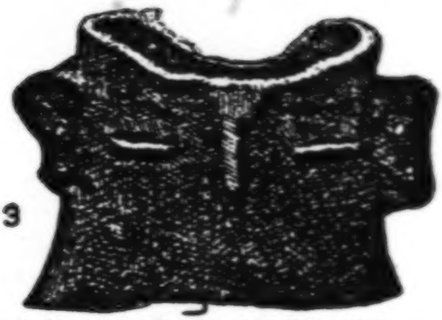

3

Anthropomorphic vessel found on the banks of the Pilcomayo near the Chiriguano village of Ibopeytí, attesting to the existence in this region of a civilized population before the Chiriguano. The vessel has a red glaze and the ears of the personage are pierced. (1/2 nat. size.)

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'399 cont./ It is already evident that the pottery of the Humahuaca region shows identical characteristics from the north of Jujuy to the vicinity of La Quiaca. To me the local variations seem absolutely negligible. Boman (2, Vol. I, p. 77) was already expressing himself in the following manner on the relations between these two

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regions: "If one wishes to compare the objects dug up in the Humahuaca region with the pre-Hispanic remains of other regions, they would be most like those of the Chichas." At

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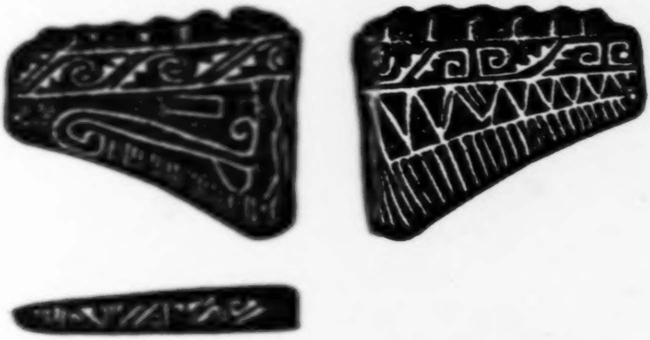

Fig. 57. Panpipe made of olive-hued stone, found on the upper Pilcomayo near the Chiriguano village of Ibopeytí at the same time as the vessel on Plate XXV. (1/2 nat. size.)

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Tolomosa in Bolivia, in the department of Tarija, the von Rosen mission (2, Fig. 175, p. 112) found an ornithomorphic dish, an exact replica of the famous puco of this type discovered at La Paya in the Calchaqui Valley.

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The Humahuaca-Chicha culture does not form an isolated bloc. It is more or less closely related to those whose remains have been studied in the northwest of Argentina in Diaguite territory, on the Puna de Atacama and de Jujuy, in the Atacama Desert, in the north of Chile and the extreme south of Peru. In the geographic area thus defined, it surely seems as though there was formerly a center of acculturation whose existence was pointed out only a few years ago.

Atacama SG5

/402 cont./

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172 The Atacama Indians, whose original territory would
174 have been the vicinity of the Atacama and Arizaro salt
131 marshes and a portion of the coastal zone near Tocopilla,
167 including the lower course of the Loa River, emigrated at an
unknown date from the south to the north. They occupied the

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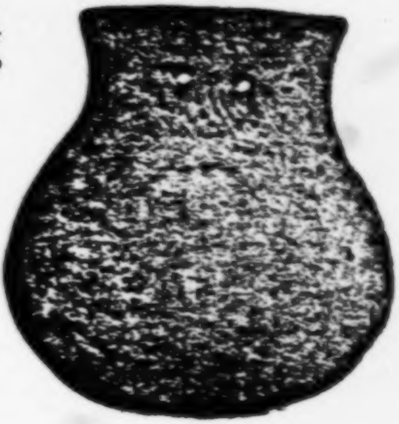

Fig. 69. Pot decorated with incised lines and provided with two holes for hanging. This object was unearthed at Caipipendí. (2/3 nat. size.)

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172 provinces of Chicha and Lipez, the region between the great
174 salt marshes of western Bolivia and the western Cordillera, and
131 spread across the whole province of Carangas and the districts
167 west of the Desaguadero. They would also have taken possession of a large part of the Titicaca and the northern plains.
Their culture would have spread to the south of modern Peru
as far as the latitude of Ica and as far as Ayacucho in the

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[177] mountains. Upon this ancient ethnic and cultural stratum
influences from the north made themselves felt (Uhle, 3, p. 13).

Chane SF8

Plate XXVI

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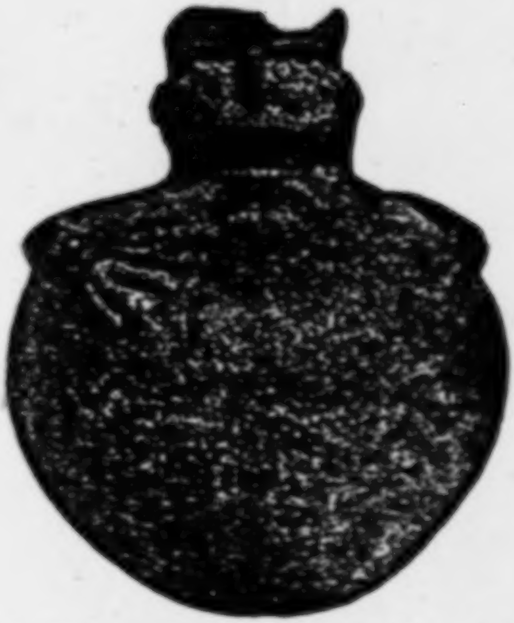

1. Anthropomorphic vessel, Chané. It is covered with a layer of white paint. Prov.: Tuyuntí (near the Aguaray). (1/3 nat. size.)

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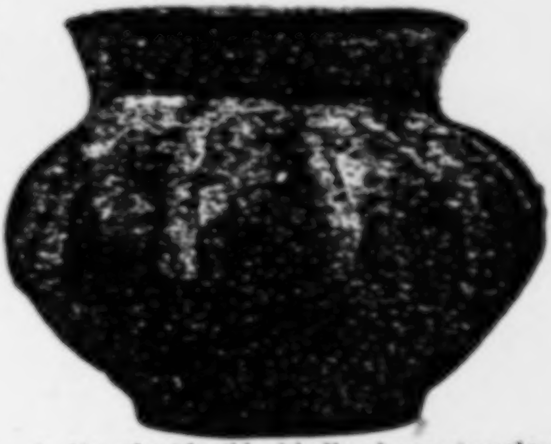

2. Vessel with ribbed belly, brown in color. Chiriguano. Prov.: Caipipendí. (1/2 nat. size.)

Atacama 565
Prehistoric Chile 563

/403 cont./

A P.C 19 531 Latcham (p. 5) says that for a long time he has also had the impression that Chincha culture had played a very important role in the development of the prehistoric art of the north and center of Chile, especially in the Diaguito-Chilean region, that is, the provinces of Atacama and Coquimbo, and that these influences had extended as far as Cachapoal in the south.

After the publication of Uhle's work, Latcham (p. 20) not only accepted his conclusions but even demonstrated the extension of Chincha culture as far as Caldera. Like Uhle, Latcham (p. 20) is of the opinion "that an examination of Diaguito-Argentine pottery would furnish proof that the traces of Chincha and Chincha-Atacama influences are very common in the art of northwestern Argentina, where all the designs reproduced (by Latcham) are found again alone or in combinations with other local motifs. These influences made themselves felt as far as the southeast and even the northeast of Bolivia, as can be ascertained by consulting the works dealing with the antiquities of these regions. In the modern pottery of the Chiriguano many of these same elements persist, as one can realize by leafing through the work of Outes. 3."

● C [415] [531] [179]

C 415 179 121 In the pages which follow I shall seek to demonstrate that Chiriguano pottery presents characteristics obliging us to rank it among those which seem to have undergone the influence of the Chincha-Atacama civilization.

A P.C 17 114 121 [648] Even if the hypothesis of the existence of a Chincha-Atacama civilization must be rejected some day, it is not any less certain that at a given moment the prehistoric tribes of the region of Atacama, of the northern coast of Chile, of the south of Peru and Bolivia, and of the north and northwest of Argentina were united by close relations, which /404/ explain the numerous points of contact of their cultures. Uhle's theory has on its side the advantage of accounting for these analogies whatever may be the reservations we might be able to formulate concerning the date this scholar attributes to the Chincha-Atacama civilization, concerning the importance and the extent he gives it.

/404 cont./

CCD A PC 192 199 121 concerning the importance and the extent he gives it. To the Chincha-Atacama sphere of influence belongs, precisely, the culture of the Andean Chincha and Humahuaca peoples whom the Chiriguano and their Arawak predecessors had as neighbors for centuries.

C e 415

2. Analysis of the Influences Exerted on the Fancy Pottery of the Chané and the Chiriguano

C e [121] The criterion of form. -- The influences which have made themselves felt on Chané and Chiriguano pottery are manifested in both form and decoration. In the pages to follow I propose to note the most striking affinities between Chiriguano and Chané vessels and those of the neighboring regions, and also to determine the importance of Guarani or other survivals which we meet here and there.

C e [191] 1. Vessels with a subglobular belly, short neck, flared lips, flattened base, constitute the most common type of fancy pottery (Plates XXXV-XL, XLVII-LIII, etc.). Pottery of this category lacks well-characterized counterparts in the Andean zone. On the contrary, they resemble the jars for *kaširi* still used by the Indians of Guiana and the Amazon (Koch-Grünberg, 2, Vol. II, Fig. 151, p. 227).

C 415 One of the yambuí (Plate XLVIII, 3)[1] of this type has as handles on each side of the neck two little miniature vessels of the same form as itself. In what is perhaps only the fancy of a native artist appears nevertheless a concept peculiar to the Andean peoples and one in harmony with their style.

C [191] 2. The yapepo (Plate XLV, 1 and 2; LIX and LX)[2] are subglobular vessels with a low neck, provided with a handle which extends from the rim to the belly; they can be considered as yambuí in miniature. This category of vessels has its equivalent in several points of the adjoining Andean zone. Thus in Calama (Atacama Desert) and in Cagua (Yura canton, Porco province) pots have been found which seem to be, from the point of view of form, replicas of Chiriguano yapepo. (Créqui de Montfort, Plate VII, Fig. 8, and Plate VIII, Fig. 11.)

[1] [See p. 221--Analyst]

[2] [See pp. 221, 244 and 245 respectively.--Analyst]

PA. /404 cont./

415 172 The cemeteries of the Isla de Tilcara have given numerous specimens of this type (Debenedetti, 2, Fig. 98, p. 152; Fig. 101, p. 154; Fig. 104, p. 157; Fig. 106, p. 158; Figs. 109-111, p. 162; Figs. 113-114, pp. 165-166), of which a specimen
● c 415 191 has also been found in the Alfarcito in the Quebrada de Humahuaca (Debenedetti, 4, Fig. 15, p. 29). /Plate XXVII appears here./

c 415 171 /405/ Vessels whose appearance is obviously similar to that of our yapepo were formerly used in Chile (Latcham, Fig. 17, p. 11).

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C 415 531 178 →

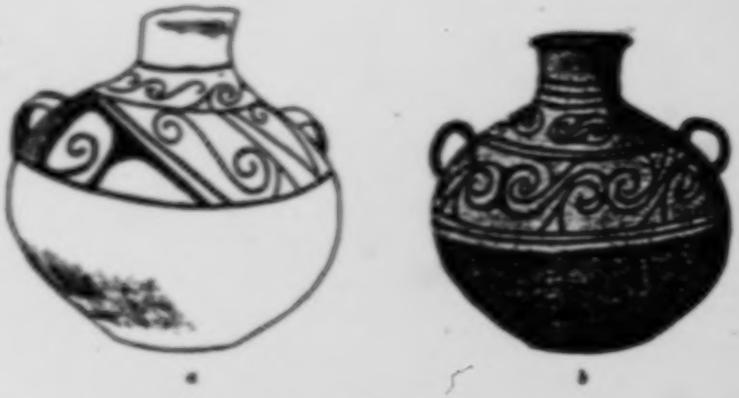


Fig. 70. The îru (a), drawn from Debenedetti, was found on the Isla de Tilcara. Vessel b is modern. It comes from the Chiriguano village of Yumbía. It attests to the fidelity with which the Chiriguano have kept to our day the ancient types of Andean pottery. (1/6 nat. size.)

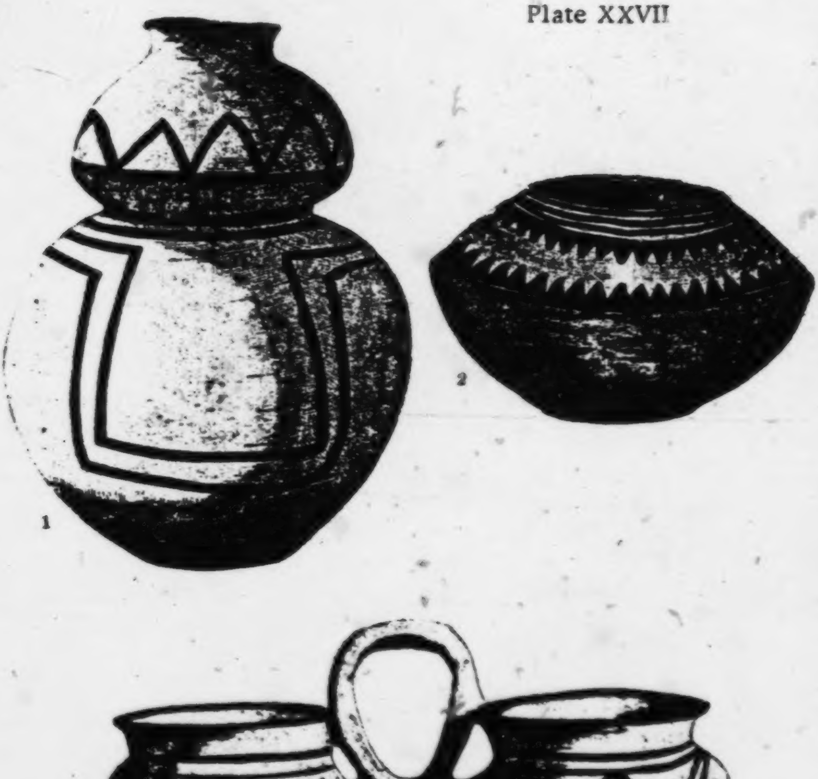
C 415 171 3. The large yambuí of Plate LV, 3,[1] is not a common type in South America. Jijon y Caamaño (p. 24, Fig. 15) cites only one specimen, coming from Imbabura in Ecuador, which was known to him outside of Chiriguano country.

4. The two yambuí of Plates XLI, 1,[2] and LV, 1[3] both come from the Ivu mission. Their form is unusual in Chiriguano country, but very interesting by reason of the analogy it offers with that of vessels dug up in Catamarca province in Caspinchango (Debenedetti, 5, Figs. 9 and 10, pp. 23-24) and that of funerary urns from La Rioja discovered and published by Boman (5, Fig. 4b, p. 24).

[1] [See p. 239--Analyst]

[2] [3] [See pp. 217 and 239 respectively--Analyst]

Plate XXVII



Chiriguano vessels (yapepo). Prov.: 1 and 3, Ivu; 2, Macharetí; 4, Caipipendí. Colors: 1 and 2, black on white; 3 and 4, red on white. (Nos. 1 = 1/4; 2-4 = 1/3 nat. size ±.)

Chane SF8
Prehistoric Argentina SI3

C /405 cont./
415 5. The îru of Fig. 70 b goes back into the class of the
171 vessels known as pseudo-apods, as some Argentinian archeologists
P.A. call them. As their name indicates, they are closely related,
[415] from the morphological point of view, to the vessels
[172] known as apods or more simply aryballuses, which constitute
in northwestern Argentina so many concrete proofs of Inca influence.
Ce Among the Chiriguano and Chané this type of pottery
[415] is exceptional, and the specimen of Fig. 70 b is a unique
[171] piece whose interest is considerably increased by the extraordinary
P.A resemblance it bears to a vessel discovered in the cemeteries
[415] of the Isla de Tilcara (Fig. 70 a). These two îru have so many
[172] similarities between them that one could easily believe them
to have come from the hands of the same artist. In the regions
C near the habitat of the Chiriguano numerous vessels of this
P.A. type have been dug up. Odilia Bregante (p. 287) /406/ enumerates
415 for the specimens found in Jujuy province the following
171 localities: Saruga, Taranta, Pucará de Tilcara, Isla de
Tilcara, and Cochinoca, for the Puna de Atacama, Antofogasta
de la Sierra. In La Paya in Salta province these aryballuses
or aryballoid vessels are very numerous, and one of them
published by Ambrosetti (6, Fig. 42, p. 62) has on the upper
part of the belly a row of triangles with volutes, which we find
again on our specimen from the upper Pilcomayo.

C 415 Vessels of this kind are, as we have said, characteristic
171 of the Inca civilization. Similar jugs already appear in
Tacna during the Chincha or Chincha-Atacama period (Uhle,
4, Plate XVII, Fig. 4; Plate XIX, Fig. 1 and 1 a; Plate XX,
C Figs. 1 and 2). /Fig. 71 appears here./

[177] This type is so little diffused in Chiriguano country that
one could not invoke its occasional presence to attest to the
strong Inca influence of civilization on these Indians.

6. The miniature vessel of Figure 71 is also a unique
piece. If its distribution on the eastern slope of the Andes
C were not so sporadic, it would constitute an eloquent proof
[177] of the persistence of Inca tradition in Chiriguano pottery.
Actually, as Linné (1, p. 161) demonstrated with the aid of

C 415 171

/406 cont./

a map, these footed vessels "bakershaped" /quoted in English/ mark out the whole extent of the Inca Empire from Ecuador to Chile and Argentina. This is the first time, however, that their presence has been noted among the Chiriguano and outside the borders proper of the Inca Empire.

C [177]

7. As Nordenskiöld (10, Fig. 48, p. 162) established, the twinned Chiriguano vessels (Plate XXVII, 3)[1] also denote an Andean influence. As for that, it suffices to compare them with the ones from the Quebrada de Humahuaca (Debenedetti, 2, Fig. 144, p. 196).

C 415 531

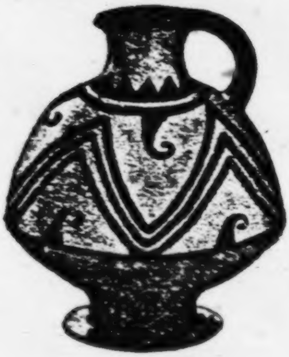


Fig. 71. Miniature footed vessel. Prov.: Cuevo. (2/5 nat. size.)

C 415 171

8. As for the vessels consisting of triple connected bodies (Plate XXVII, 4), Jijon y Caamaño (p. 26) believes them to be of Central American origin. "Their center of dispersion," he says, "must be located in a southern region of Central America, from where, perhaps through the medium of the Arawak, they arrived in the Chaco and Peru." This hypothesis is tempting.

C A 415 171

9. The Central American origin of the footed bowl or "compote" (Fig. 72)[2] could not be doubted. Jijon y Caamaño (pp. 31-51), Rivet (2, pp. 8-9), and Linné (2, Map 6, p. 107) have amply demonstrated it. On the subject of one of the varieties of this type, Jijon y Caamaño (p. 34) makes the

[1] [See p. 183 -- Analyst]

[2] [See p. 187 -- Analyst]

C A /406 cont./

415 171 following observation: "The dispersion and evolution of a type of pottery whose /407/ origin must be assigned to the peoples near the Isthmus of Panama can be due only to the Arawak, who spread it among the nations living beyond the Andes, in regions as southerly as the Chaco and the territory of Misiones (1).

> 1. Ambrosetti (2, p. 714) as a matter of fact represents Kainguá vessels with a circular foot. I doubt very much that these pots reproduce a primitive type. They are badly fired, badly modeled, asymmetric, and the foot, which is fastened to the vessel when the latter is finished, is easily detached from it.
>
> These vessels are perhaps crude imitations of European pottery.

A 171 In South America the Arawak have been the propagators of Central-American culture among the primitive tribes located east of the Andes."

C A 415 171 C [126] 10. The distribution of vessels with a ribbed belly, of which I acquired a marvelous specimen in the Caipipendí valley (Plate XXVI, 2),[1] is almost the same as that of the "compotes," and we can, as with the latter, rank them with the pottery which shows a Central-American origin /Fig. 72 appears here/ and whose dispersion was the work of the Arawak (Jijon y Caamaño, p. 5, Fig. 1 D).

C 415 171 C [172] 11. The vessel of Plate XXVII, 2[2] is composed of two superimposed domes: one in the shape of a truncated cone, the other rounded. It comes from Ivu and is the only specimen of this form that I encountered in the course of my trip. An identical vessel was dug up on the upper Paraná by Ambrosetti (3, plate between pp. 256-257, Fig. 5). Similar receptacles are still in use by the Yuruná /Yuruna/ Indians of the lower Xingú (Steinen, 1, plate between pp. 266-267). The presence C 415 171 172 of vessels of this type among the ancient Guarani authorizes us to suppose that our specimen from Ivu represents /408/ the survival of an ancient form of Guarani pottery which the Chiriguano have not abandoned.

[1] [See p. 179--Analyst]

[2] [See p. 183--Analyst]

1: Métraux--187 E-5 (1929) 1930 SF10 Chiriguano SF10
Chane SF8
Diaguita SG6

/408 cont./

000
CC Chiriguano have not abandoned. It is not out of the question,
415 however, that the Chané did not contribute toward preserving
171 this type,[1] if it was really they who made it known to the popu-
C lations of tropical America east of the Andes. Jijon y Caamaño
● [415] (pp. 11-13) studied its distribution in the two Americas and
[171] placed its center of diffusion in Central America. In Diaguite
000

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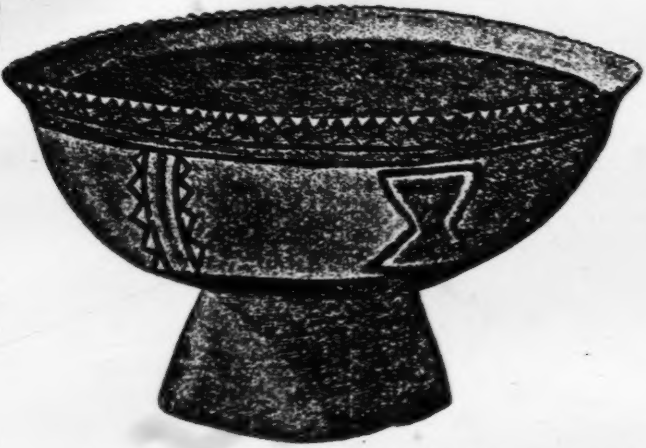

Fig. 72. Footed bowl or "compote." Black and red motifs on cream background. Prov.: Carurutí. (1/3 nat. size.)

C
415 In Diaguite
171 country we find pottery of a more or less similar aspect, but
D which must nevertheless be eliminated from this category.
415 It is indeed provided either with a tongue-shaped appendage or
531 with an anthropomorphic or zoomorphic figuration (Ambrosetti,
6, pp. 372-380).

[1] [i.e. The type depicted in plate XXVII, 2, p. 183 -- Analyst]

/408 cont./

415 12. The ornithomorphic vessel of Figure 73 seems to
171 have come from the hands of the ancient potters of the Isla
172 de Tilcara who, several centuries ago, used to make analogous
pieces, without a doubt servilely imitated by the Chané and the ancestors of the Chiriguano (see Debenedetti, 2, Figs. 139-141, p. 191). Boman (2, Vol. II, p. 786, Fig. 193) also publishes a bird-shaped vessel, perhaps of the pavo del monte (Penelope obscura, Vieill. ?), found not far from the present-day village of Humahuaca and which, in addition to its general appearance, has in common with our specimen

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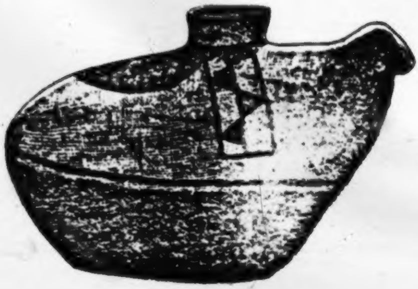


Fig. 73. Ornithomorphic vessel. Chiriguano. Motifs: pink and green. Prov.: Tarairí. (1/3 nat. size.)

415 from Tarairí designs painted on the sides which represent the
171
172 wings and tail.

The Chiriguano Indians of the Caipipendí valley and the
415 Ivu mission still like to serve chicha in vessels to which they
532 give the appearance of a bull (Plate XXVIII, 7-9).[1] Llama-
[273] shaped vessels have been discovered in the Quebrada de
[172] Humahuaca (Debenedetti, 4, p. 27, Fig. 14, and Odilia
[171] Bregante, Fig. 132, p. 147). Perhaps these are the prototypes
of the present-day Chiriguano specimens. Why suppose that
[114] these receptacles had solely ritual usage, as Mr. Debenedetti
thinks, when one sees the modern Chiriguano make an entirely
secular use of them?

[1] [See p. 190--Analyst]

Chane SF8
Prehistoric Ecuador SD3
Prehistoric Chile SG3

P.C. /408 cont./

Ce 415 171 532

13. The marvelous vessel of Plate XXVI,[2] 1 is entirely of Andean inspiration. The idea of giving the shape of a human head to the neck of the yuro was not foreign to the ancient populations of the Quebrada de Humahuaca (Boman, 2, Vol. II, Fig. 190 and Plate LXXXII, Fig. f; and Debenedetti, 2, Fig. 136, p. 186). Up to the present time this region has not provided any vessel of this type which, by its beauty and the sureness of the modeling, /Plate XXVIII appears here/ /409/ was comparable to our specimen from the Itiyuro. The woman who fashioned it was a worthy artist.

C [415]

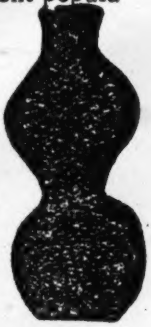


Fig. 74. Vessel painted red. Prov.: Carurutí. (1/4 nat. size.)

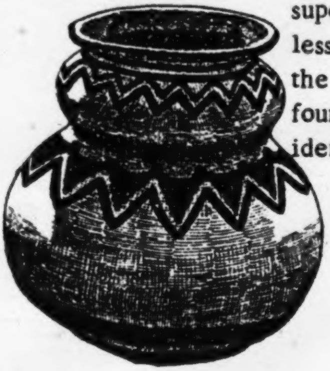
P.E Ce 415 171 532

In Ecuador, vessels with a globular belly surmounted by a human head are frequent, but few specimens from this region can compete with this Chané masterpiece.

C 415 171 172

14. The vessels of Figures 74 and 75 and Plate XXVII, 1,[2] are characterized by a narrowing which separates them into two superimposed globular bodies of more or less similar diameter. In the valley of the Loa River a vessel of similar type was found which presents the most surprising identity with the one of Figure 74. Montell (1, Fig. 34 e, p. 28), who publishes it, makes the following remarks about it.

[Text Continues on P. 191]



[531]

Fig. 75. Vessel decorated with red and black motifs. Prov.: Caipipendí. (2/5 nat. size.)

[1] [See p. 179-- Analyst]
[2] [See p. 183--Analyst]

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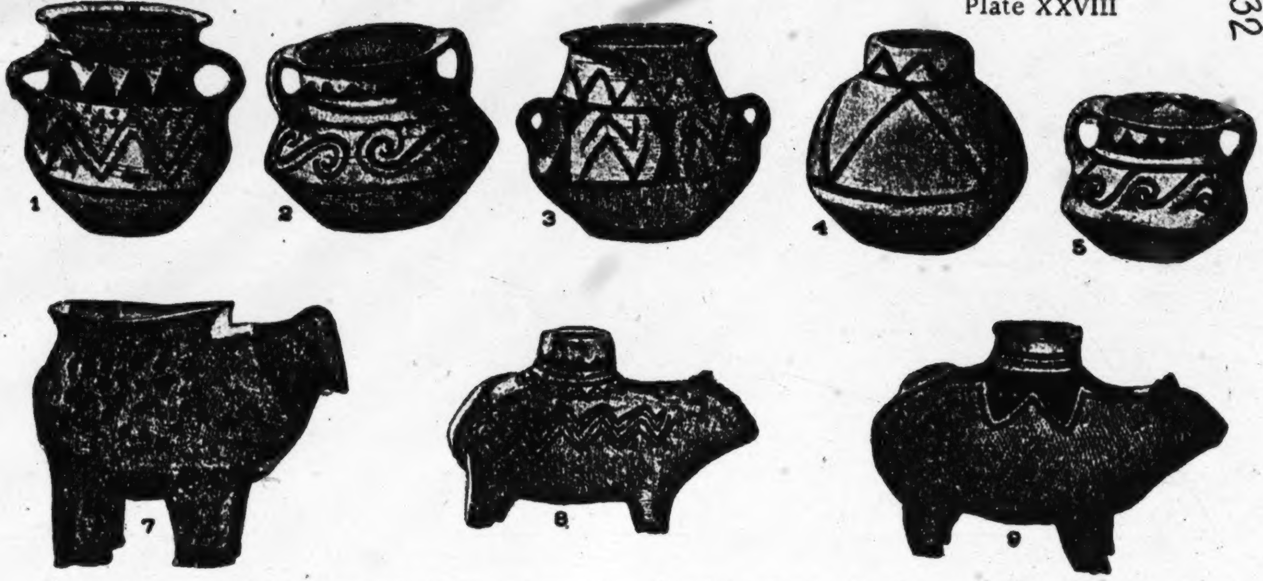
Plate XXVIII



Miniature Chiriguano vessels (toys and amusing objects). Prov.: 1, Ibopeytí; 2 and 5, Yumbía; 3, Tintapaw; 4, Tarairí; 7-9, Carurutí. Colors: red brown and black on white background, except Nos. 4 and 7, red brown on white. (Nos. 1 and 4 = 1/2; 2, 3, 5-9 = 1/3 nat. size ±.)

1: Métraux--190 E-5 (1929) 1930 SF10 Chiriguano SF10

/409 cont./

415 171 172 "This particular form is not unique. It is found in the northern cultures of the coast of Peru and its area of dispersion stretches as far as Pachacamac and Ancon, including Lambayeque, Cajamarca, and Trujillo. East of the Andes, this type exists among the Chiriguano, the Ashluslay, and the Lengua. Specimens of it have been dug up by Debenedetti in Tilcara and in the Quebrada de Humahuaca. The find of the Loa River contributes to forming a link of this distribution uniting the /Fig. 75 appears here/ /see p. 189/ eastern zone with that of the Peruvian culture whence this type surely emanates.

Pots of this type show a striking resemblance to the signal trumpets of Guiana. Objects of this kind have been described by many authors and depicted by Gumilla and Roth. If one disregards the mouth and the base, one cannot distinguish these vessels from the terra-cotta trumpets. It is probable that this instrument was discovered independently in Guiana. In any case it is still too early to present theories on the possible connections between the two types, without preliminary research having been done to justify such comparisons."

To the distribution indicated by Montell must be added Molino del Puesto and Caspinchango in Catamarca province (Bruch, 2, Fig. 42, p. 54, and Debenedetti, 5, Fig. 14, p. 27).

415 171 15. Jugs with a globular belly or one in the shape of a truncated cone, with a short and narrow cylindrical neck from which often begins a small handle attaching at the other end /410/ to the belly of the receptacle (Plate LVI, 1, 2, and 4; Plate LVIII, etc.),[1] make up a very common type in all of the Chiriguano region which is in the hands of the missions. Up to the present the neighboring territories have not produced prehistoric vessels which could have served as models for the Chiriguano or the Chané at the time when Andean influence made itself felt on them. The only jug belonging to this type, outside Chiriguano country, is one found in Chile in Valdivia, which Medina (Fig. 184) reproduces in his great work on the antiquities

[1] [See pp. 238 and 240 respectively-- Analyst]

Prehistoric Argentina SF3

C /410 cont./

● 415 171 of this country (1).

P.A. [415]

1. Vessels of this type also show great similarity to the Araucan ones which were discovered in the Argentinian territory of the Neuquén. (San Martin, pp. 10-15, pp. 131 and 132.)

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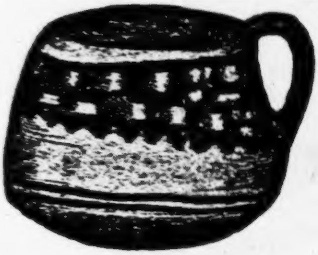


Fig. 76. Cup decorated with black checkerwork on cream background. Prov.: Igüembé Valley. (1/3 nat. size.)

C 415 171

16. The little cup of Figure 76 is the only one of this shape I was able to collect. Like the vessels examined thus far, it constitutes by its aspect and decoration an Andean survival. Many cups have been discovered in northwestern Argentina. Some of these specimens have been found on the Isla de Tilcara (Debenedetti, 2, Fig. 149, p. 206) and at Casabindo in the Puna de Jujuy (Lehmann-Nitsche, Pl. IV, 5 D).

P.A. [172] [415]

17. Bowls have such a wide distribution in South America that their presence among the Chiriguano would not by itself be a sufficient argument to demonstrate the Andean origin of their culture. However, among these Indians, the numerous specimens of this category of receptacles found in each village show such similarities with the puco of the adjoining Andean regions that we are obliged to consider them as borrowed forms.

C [177]

Prehistoric Argentina SI3
Prehistoric Chile SG3

C /410 cont./

● 415 171 Thus, for example, the puco of Plate XIX, 2 and 4[1] are nearly identical with certain dishes coming from La Poma, Salta province. (Dillenius, Fig. 7, p. 13.)

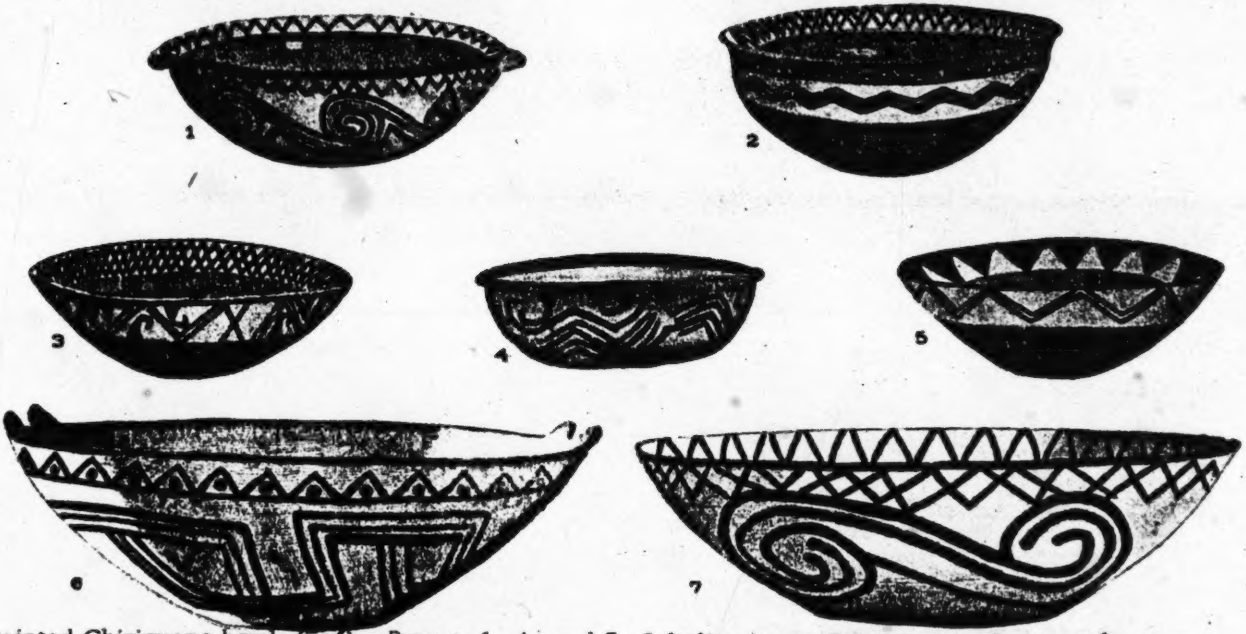
The Chiriguano puco (Fig. XIX, 3) could easily be mixed with a specimen from La Paya (Ambrosetti, 6, Fig. 185, p. 368), which, like it, has two nipples on each side of the rim.

C [531] The small bowl of Figure 77 carries on the rim two heads of a mammal stylized to the point that one can identify it as a llama or a puma, as one wishes. The two appendages in relief are perforated to allow a suspension cord to pass through. One would never finish enumerating all the receptacles of the Andean region which are decorated with the same motif. I shall limit myself to citing, in the countries adjoining the habitat of the Chiriguano, /Plate XXIX appears here/ /411/ P.A. [172] [415] several analogous finds. Thus, a dish of this type was dug up at Casabindo, on the Puna de Jujuy (Ambrosetti, 4, Fig. 49 b, p. 39, Vol. LIV) and at La Paya (Ambrosetti, 6, Fig. 181, p. 364).

C 415 531 Several bowls (Plate XXIX, 1 and 6) of my collections are provided /Fig. 77 appears here/ with small nipples on the sides, whose use is, at first sight, enigmatic. As Rosen (2, p. 109, Figs. 167-188) has demonstrated, they are appendages which permit passing a small cord around the dish and hanging it. On some Chiriguano specimens these protuberances are perforated and a string passed through. By this means, /Fig. 78 appears here/ the bowl is suspended from the roof beams. P.C. [415] Several from the Quebrada de Humahuaca (Debenedetti, 2, Figs. 60-63, pp. 111-112) also show these protuberances, whose use must have been the same as among the present-day Chiriguano. These nipples are doubtless handles or ears which, having lost all practical usefulness, were reduced /412/ to the state of simple ornamental motifs and not, as was believed, of still embryonic handles.

[1] [See p. 135--Analyst]

Plate XXIX



Painted Chiriguano bowls (naé). Prov.: 1, 4, and 7, Saladito (upper Pilcomayo); 2, Yumbía; 3 and 5, Tintapaw (upper Pilcomayo); 6, Ivu. Colors: black and red on white background. (Nos. 1-5 = 1/4; 6 = 1/3; 7 = 1/2 about nat. size ± .)

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Peruvian Prehistory SE4

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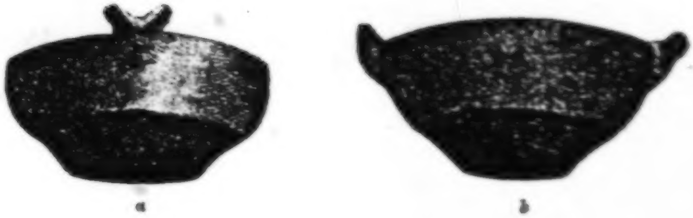

Fig. 77. Small bowl with zoomorphic ear and hole for hanging. Prov.: Caipipendí. (1/3 nat. size.)

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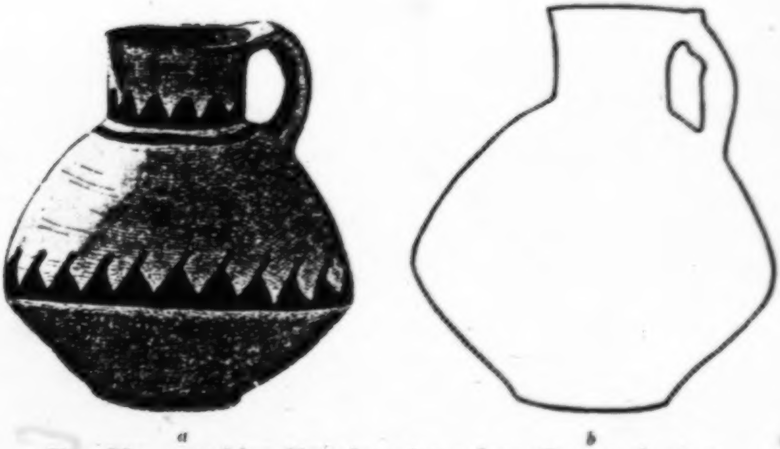


Fig. 78. a and b. Vessel a comes from Cuevo; b gives the profile of a vessel found at Tacna and attributed by Uhle to the Inca period.

Chané SF8
Arawakan Indians SR6
Guarani SM4
Peruvian Prehistory SE4

C /412 cont./

● 415 171 pp 415 18. To put an end to these comparisons, I shall call attention to two vessels (Fig. 78 a and b), one acquired in Ivu in the Chaco and the other in Tacna, and dating from the Inca period (Uhle, 4, Plate XXVIII, 2). A simple glance at the two figures permits the establishment of their perfect identity.

C Ce 415 171 In short, from these comparisons and the ones we made on the subject of pottery in common use, we can draw the following conclusions: Chiriguano and Chané pottery is, from the morphological point of view, closely related to that of the ancient populations of southern Bolivia and northern Argentina and therefore offers numerous points of contact with the C Ce [179] Chincha-Atacama civilizations. It still keeps traces of strong Inca influences (footed vessel (baker-shaped /in English/), aryballoid jars, ornithomorphic and anthropomorphic vessels, bowls, etc.). The ancient Arawak ethnic substratum is mani- A [415] fested in this sphere by the survival of several special types of pottery (vessels in the form of beakers or bowls (compoteras), vessels with a ribbed belly, vessels with three connecting bodies, etc.).

C Ce G 415 The pottery in everyday use is clearly of Guarani inspiration and in its general features has remained identical to those of the ancient Guarani of Bolivia.

C 531 184

Comparative Study of the Principal Decorative Motifs of Chiriguano Pottery and That of the Neighboring Andean Peoples

The triangle with volute. In the region of the upper Pilcomayo the fundamental motif of pottery decoration is the triangle whose apex is prolonged in a volute or spiral (Plates XXXII-XXXIII,[3] 136-199). This decorative element is repeated to repletion on all the vessels I collected from the village of Saladito to the valley of Igüembé. Elsewhere it becomes less frequent and takes on a more rudimentary form, which can be considered as further developed or degenerated.

[3] [See PP. 200-201 -- Analyst]

P.A. 531 114

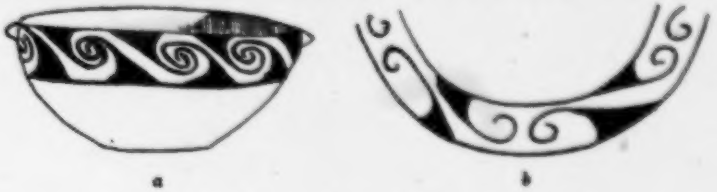
/415 cont./

On the other hand, the excavations carried out on the Isla de Tilcara have produced only a few specimens of pottery whose ornamentation was curvilinear. Debenedetti (2, p. 88) considers the latter, for reasons which I cannot accept, as foreign to the locality. Nevertheless, he has reproduced in his book the decoration of two dishes which is made up of facing triangles with volutes (Debenedetti, 2, Figs. 53 and 54, pp. 88-89) (Fig. 79); and he notes the same design on two other dishes which he does not reproduce. In the same publication (Debenedetti, 2, Fig. 113, p. 165; Fig. 114, p. 166; Fig. 115, p. 166) are represented three vessels similar to the Chiriguano *yapepo* and also decorated with hooked triangles.

● C [415] [531] [171]

C 415 171 531

/416/ The most interesting piece in this respect is the



P.A 415 531

Fig. 79. a, bowl from the Isla de Tilcara, whose rim is decorated with facing voluted triangles; b, border of a dish decorated with voluted triangles (Isla Tilcara) (from Debenedetti).

C 415 171 531

yuro of Figure 70 b, reproduced from a drawing given by Debenedetti (2, Fig. 124, p. 175). We have already seen that its form is identical with that of a Chiriguano *îru* I bought on the upper Pilcomayo. The same is true for the general elements of its decoration.

PA 531

The voluted triangle is found on three other pieces from the Isla de Tilcara (Debenedetti, 2, Fig. 160, p. 217; Figs. 161 and 163, p. 217), which Debenedetti (2, p. 218) classes among the pottery imported to the Isla de Tilcara and utilized by *curacas* /chiefs/. Our *yambuí* from the upper Pilcomayo, which from the artistic point of view are very superior to the specimens described by Debenedetti, have often been bought

C 415 531 171 126

C /416 cont./
531 by me in humble cabins whose owners were certainly not
●415 curacas, but poor devils who had the luck to have a mother
121 or grandmother who was an expert potter. If the criterion of
[126] Mr. Debenedetti were admissible, the crude pottery and the
[114] fancy vessels which can be bought in every Chané or
C Chiriguano village would be products of two different civiliza-
415 tions. In reality the fancy pottery is used on feast days for
drinking chicha; and the other, more humble in appearance,
is adapted to daily needs.

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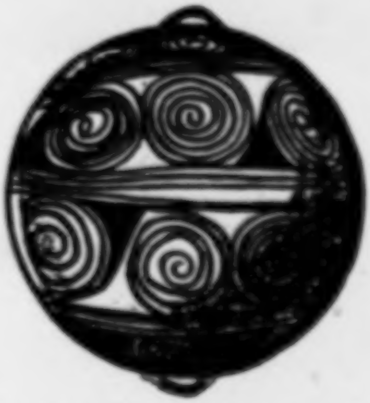

Fig. 80. Dish from Tilcara and decorated with red voluted triangles on a white background. (1/6 nat. size ±.)

P.A
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[114] Besides, the voluted triangle is more frequent on the Isla de Tilcara than Debenedetti wishes us to think. In addition to the examples cited, seven others must be added (Debenedetti, 2, Fig. 24, p. 59; Fig. 30, p. 63; Fig. 40, p. 70; Fig. 48, p. 80; Fig. 165, p. 219; Fig. 165, pp. 219-220). A vessel from Alfarcito in the same Quebrada bears a triangle with volute on the inside rim of the neck (Debenedetti, 4, Fig. 15, p. 29).

Plate XXXV

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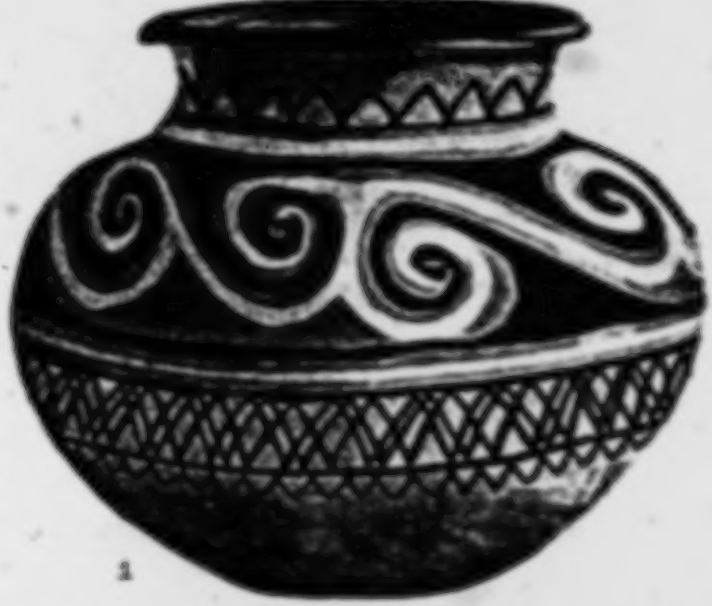

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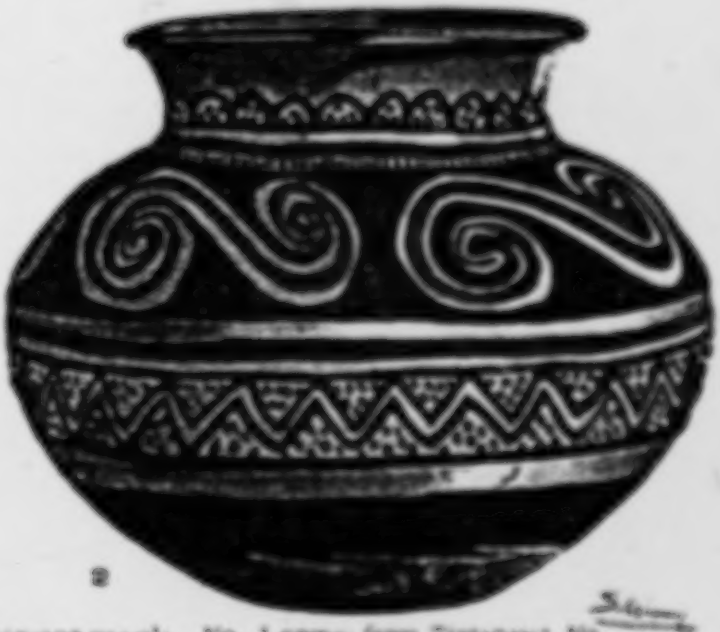

2

Chiriguano vessels. No. 1 comes from Tentapew; No. 2 from Saladito (upper Pilcomayo). (about 1/3 nat. size.)

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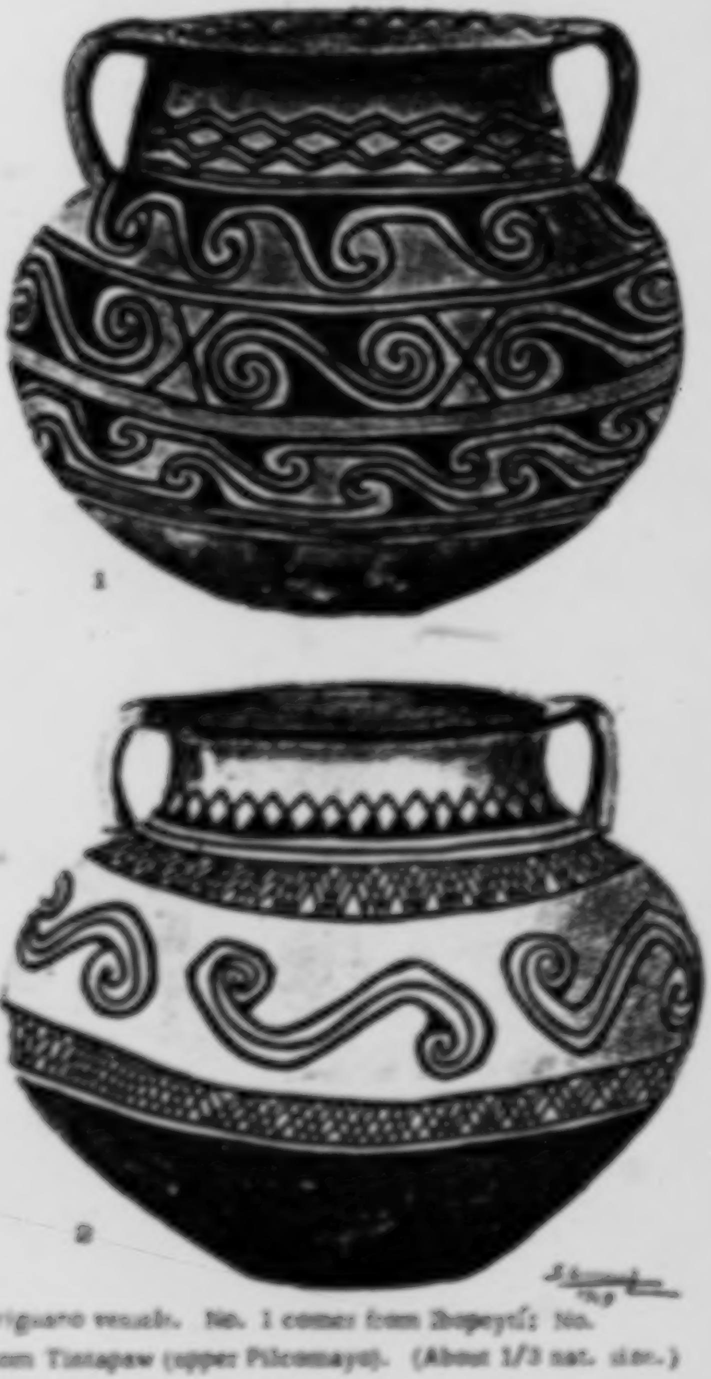
Plate XXXVI



Chiriguano vessels. No. 1 comes from Ibopeytí; No. 2 from Tianapew (upper Pilcomayo). (About 1/3 nat. size.)

Plate XXXVII

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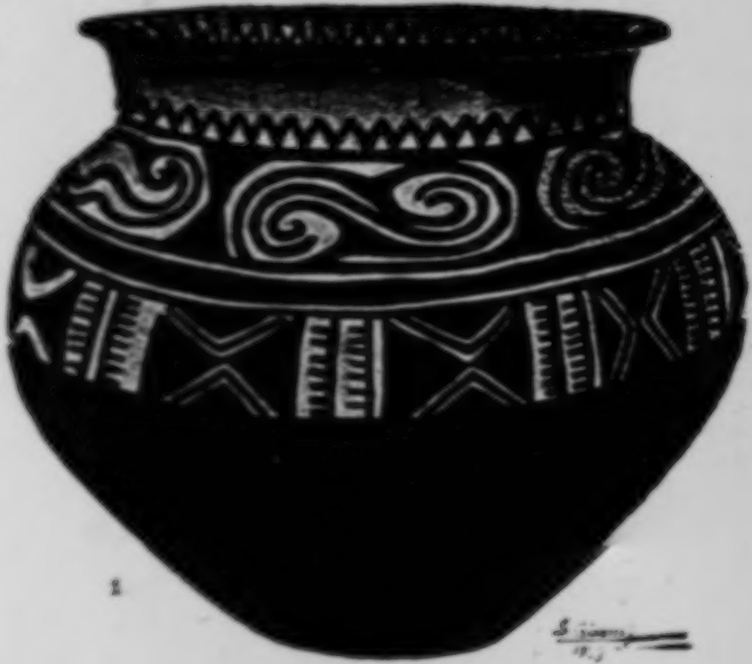

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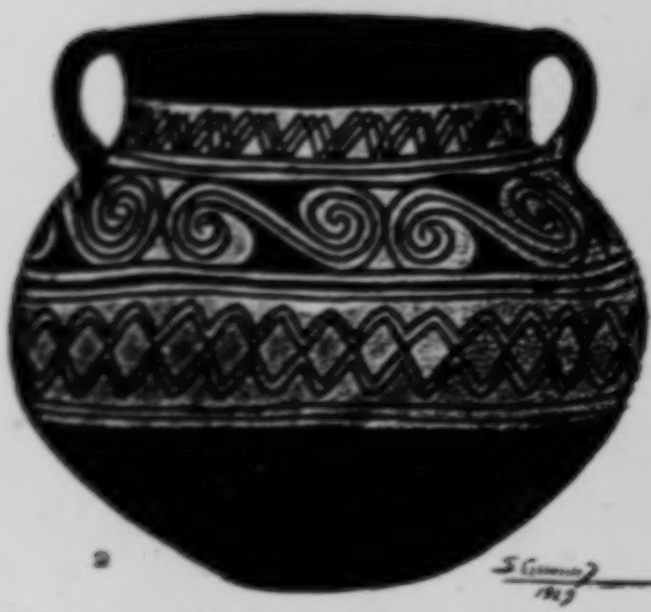

2

Chiriguano vessels. No. 1 comes from the Igüembé Valley: No. 2 from Saladito (upper Pilcomayo). (About 1/3 nat. size.)

Chane SF8

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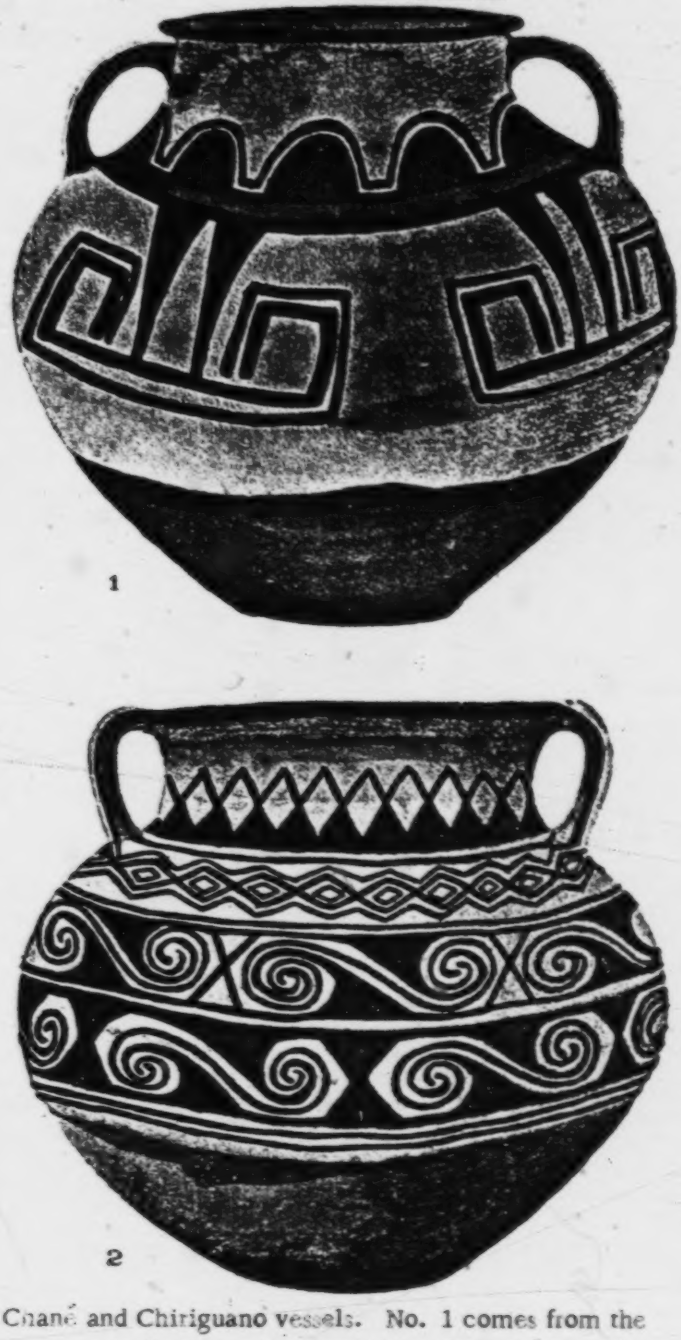
Plate XXXVIII



Chané and Chiriguano vessels. No. 1 comes from the Aguaray (Salta Chaco); No. 2 from Ibopeytí (upper Pilcomayo). (About 1/3 nat. size.)

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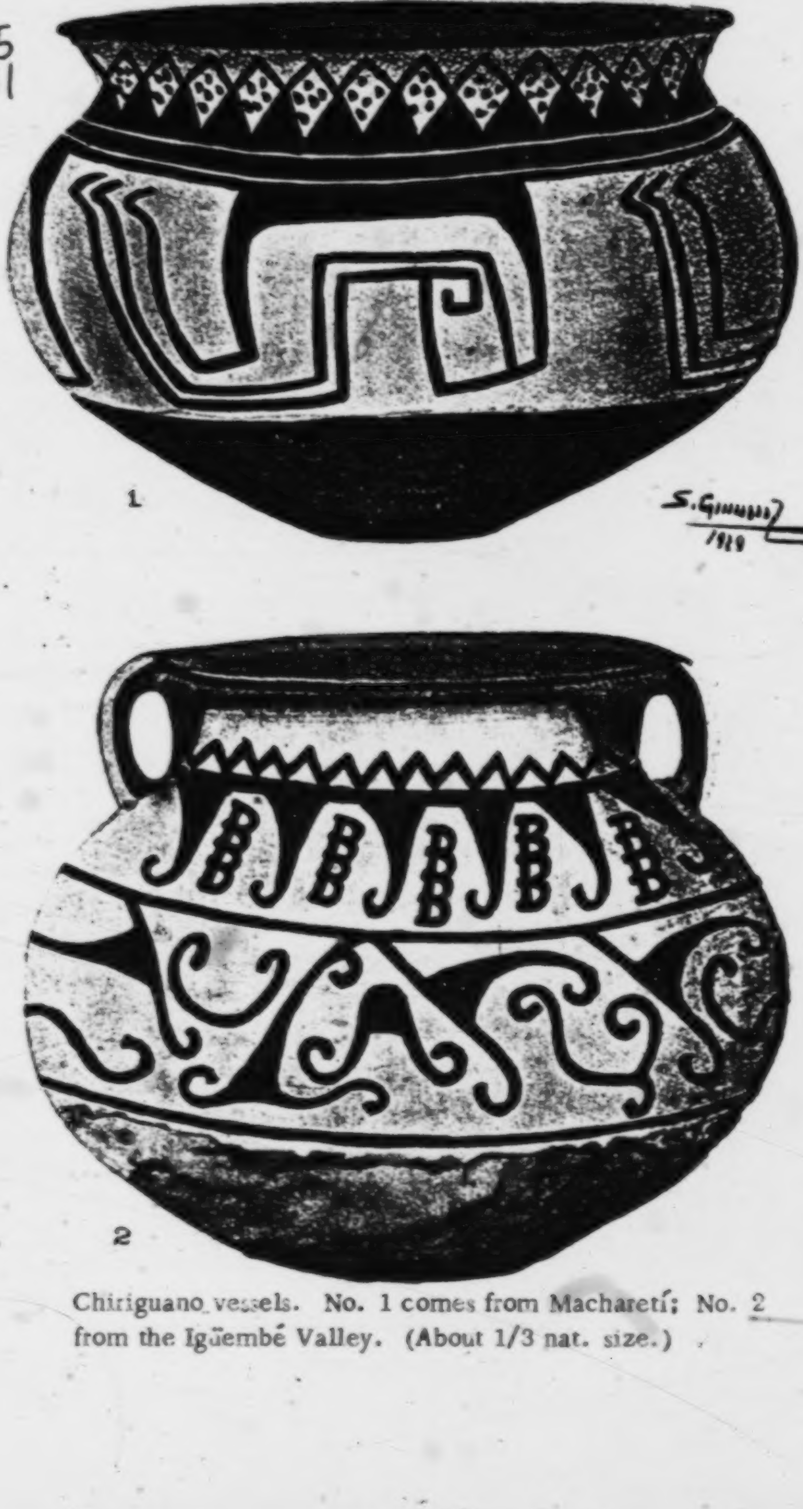

Chiriguano vessels. No. 1 comes from Macharetí; No. 2 from the Igüembé Valley. (About 1/3 nat. size.)

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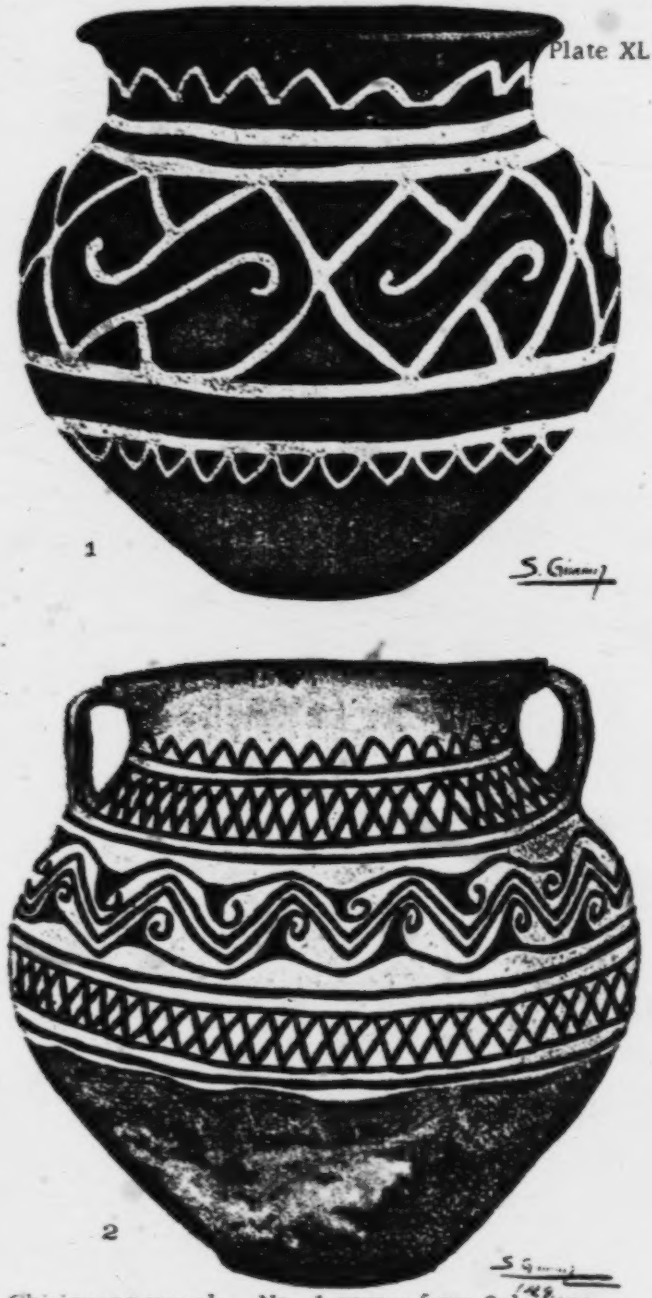
Plate XL


1
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2
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Chiriguano vessels. No. 1 comes from Saladito; No. 2 from the Igũembé Valley. (About 1/3 nat. size.)

Plate XLI

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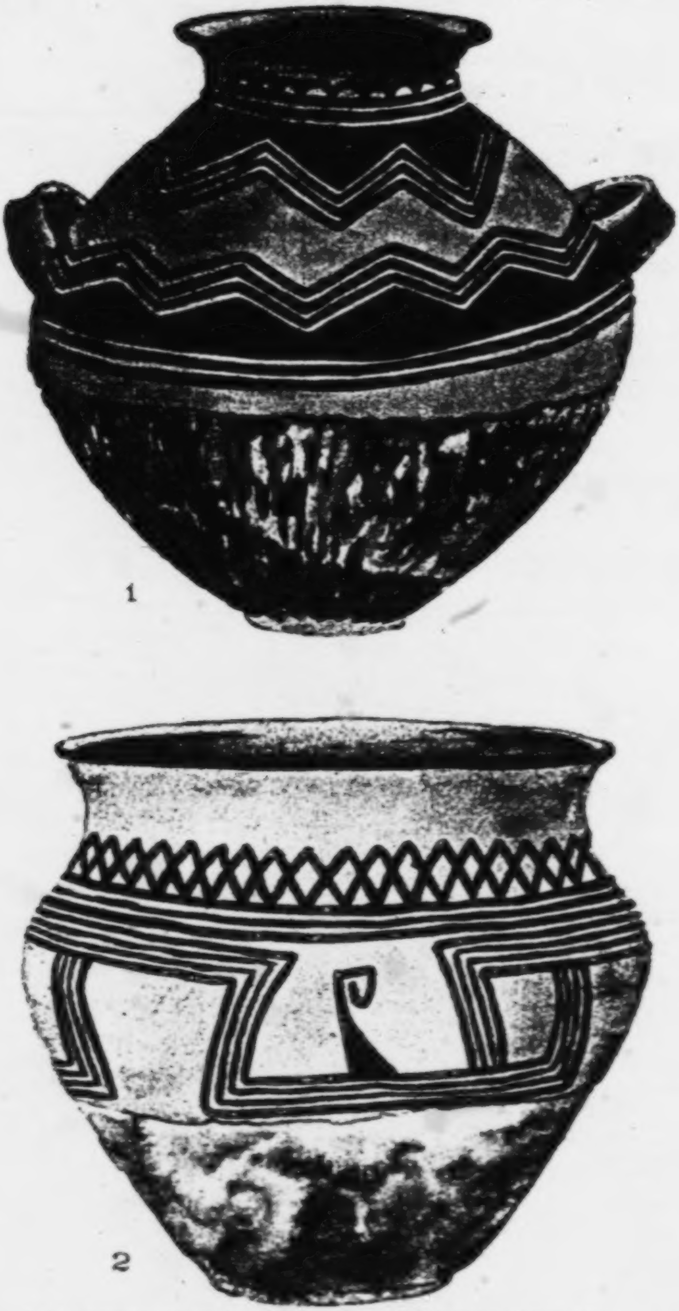

Chiriguano vessels. Nos. 1 and 2 come from Ivu.
(About 1/3 nat. size.)

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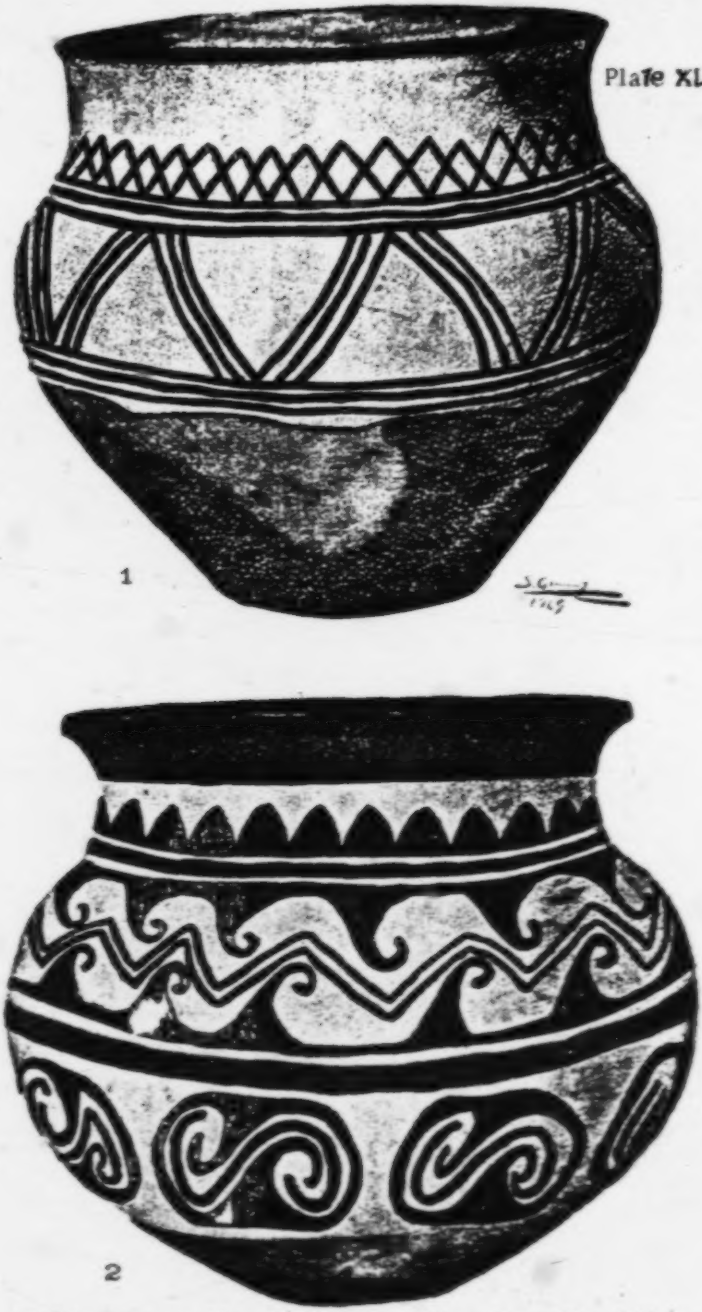
Plate XLII



Chiriguano vessels. No. 1 comes from Ivu; No. 2 from Saladito (upper Pilcomayo). (About 1/3 nat. size.)

1: Métraux--219 E-5 (1929) 1930 SF10 Chiriguano SF10
Plate XLIII

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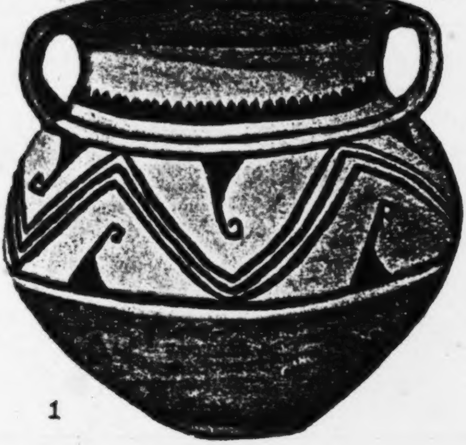

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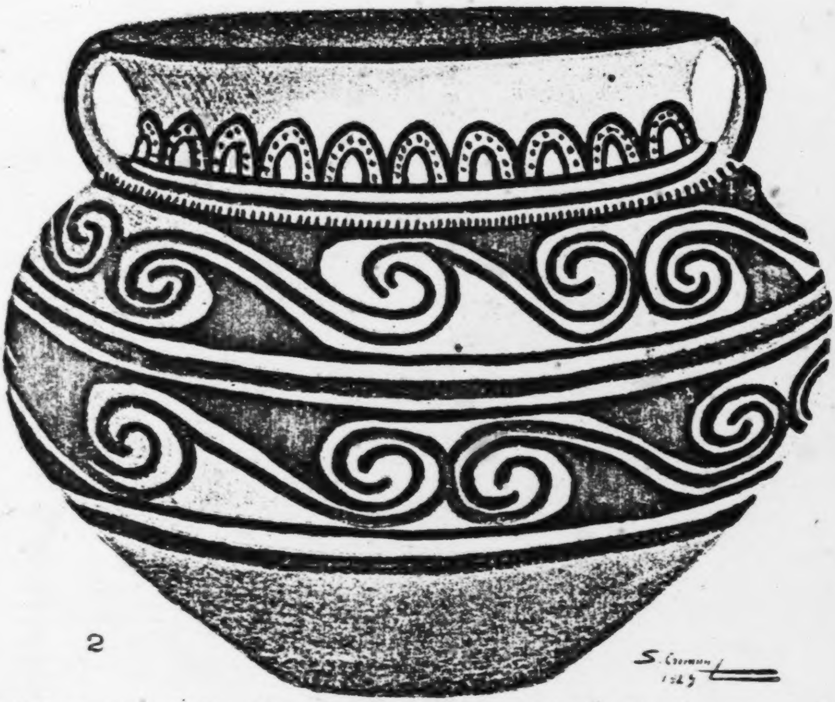
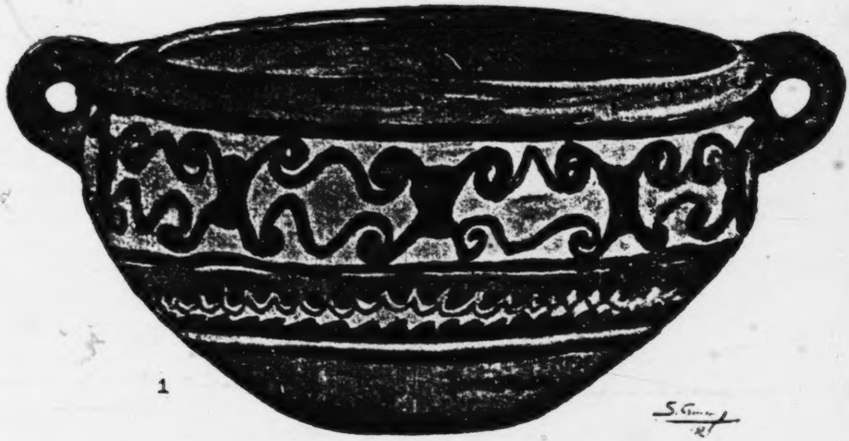


2

Chiriguano vessels. No. 1 comes from Macharetí; No. 2 from Saladito (upper Pilcomayo). (About 1/3 nat. size.)

Plate XLIV



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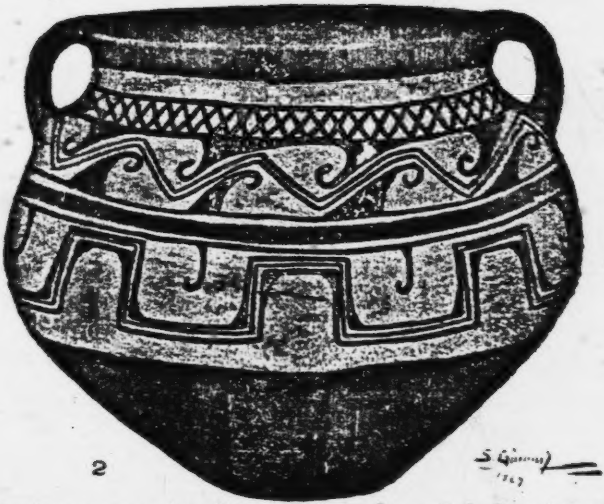

2

Chiriguano vessels: No. 1 comes from Saladito (upper Pilcomayo); No. 2 from the Igüembé Valley. (About 1/3 nat. size.)

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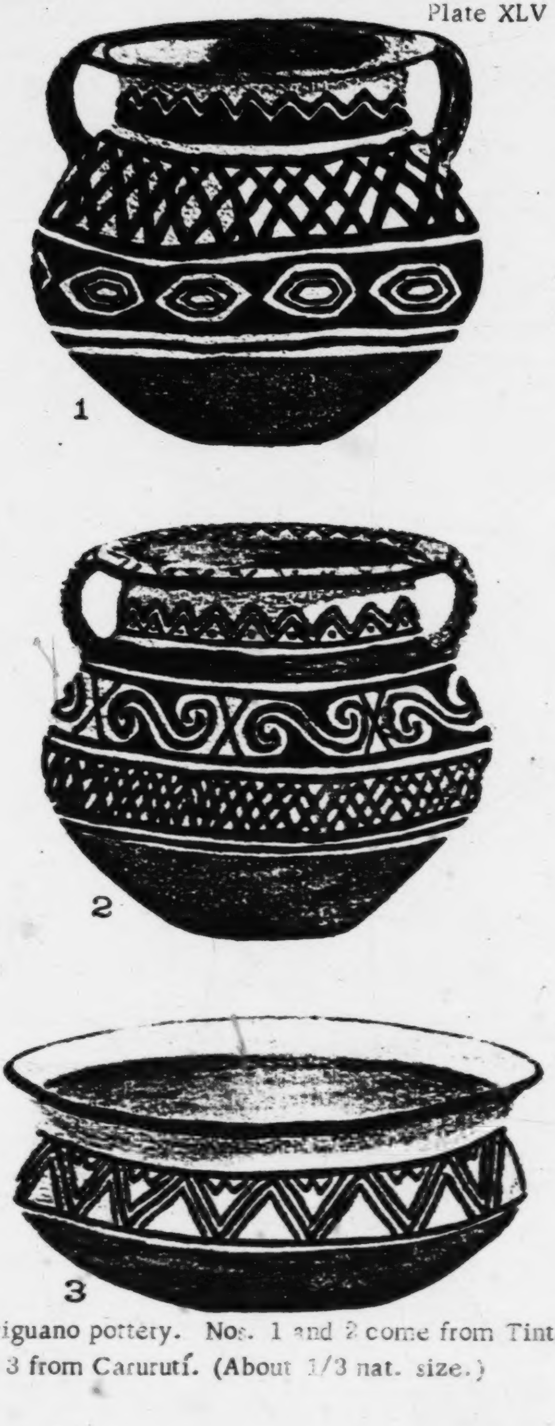
Plate XLV



Chiriguano pottery. Nos. 1 and 2 come from Tintapaw; No. 3 from Carurutí. (About 1/3 nat. size.)

Plate XLVII

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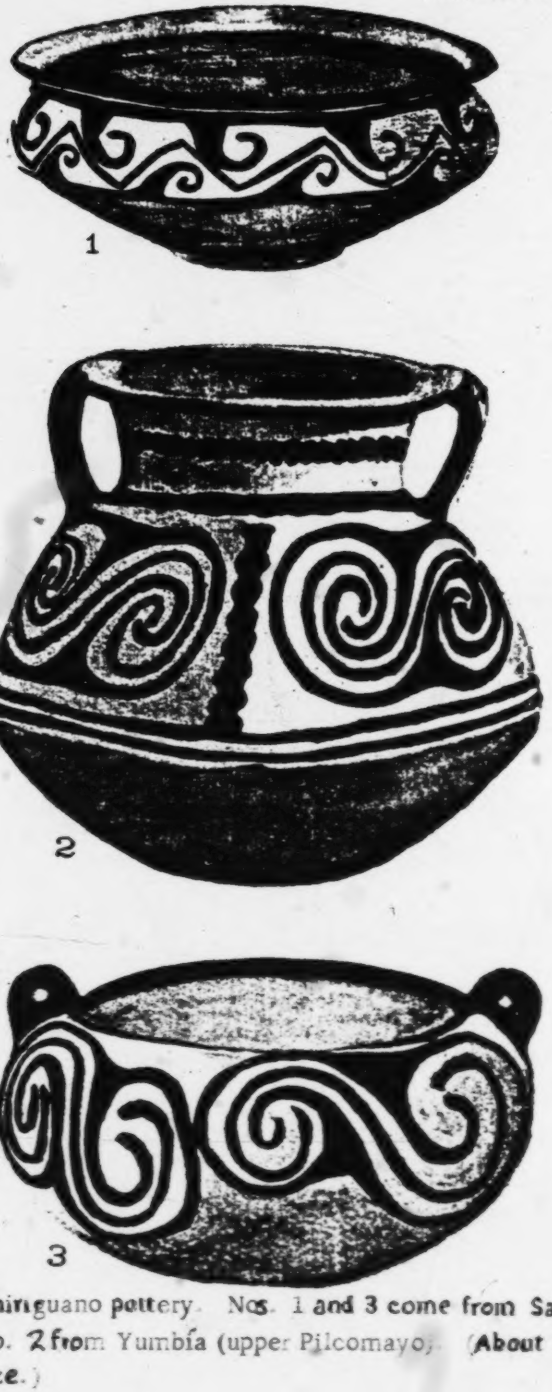


Chiriguano pottery. Nos. 1 and 3 come from Saladito; No. 2 from Yumbía (upper Pilcomayo). (About 1/3 nat. size.)

Diaguita SG6
Prehistoric Argentina SI3

/421 cont./

D 531 very exaggerated stylization of the famous snake with a bipartite head so characteristic of the art of this region. However, a puco PA 531 from Molino del Puesto, Catamarca province, exhibits a border, painted in black on a red background, which is composed of triangles with volutes and couchant S's (Bruch, 2, Fig. 43 a, p. 56).

C 415 531

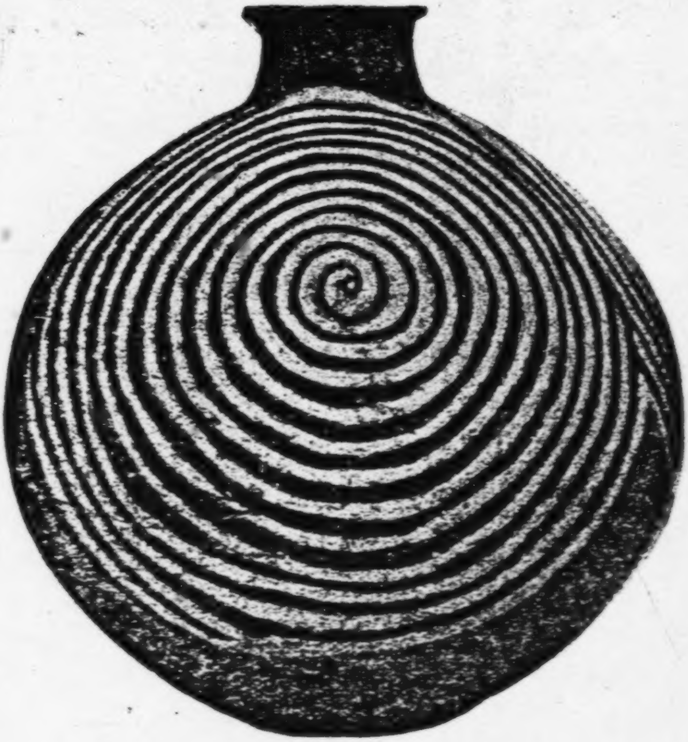
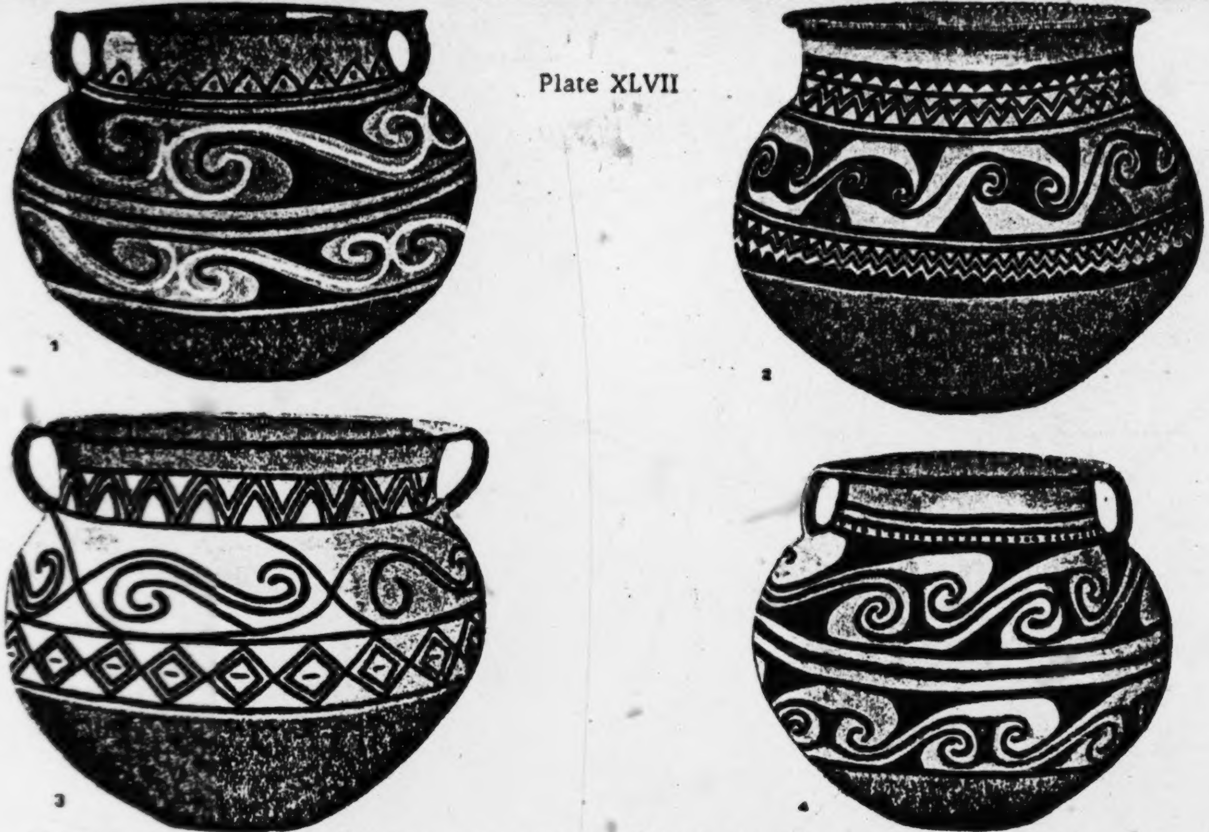


Fig. 81. Large painted îru. Prov.: Saladito (upper Pilcomayo). Colors: white on red. (About 1/4 nat. size.)

C 531 Spirals (Plate XXXII, 165, and Fig. 81). The decoration of certain vessels from the upper Pilcomayo and the Santa Rosa mission (Nordenskiöld, 14, Fig. 70, p. 58) consists of a large spiral making many turns and covering almost the whole exterior surface of the receptacle. Just as in certain cases the volute was transformed into fretwork, this spiral gave birth to the motif seen on the vessel of Plate LV, 3,[1] which is composed of a series of concentric rectangles.

[1] [See p. 237--Analyst]

Plate XLVII



Chiriguano vessels (yambuí). Prov.: 1 and 4, Saladito (upper Pilcomayo); 2 and 3, Tintapaw (upper Pilcomayo). Colors: 1, black and white motifs on red background; 2-4, red and black motifs on white background. (Nos. 1, 3, and 4 = 1/4; 2 = 1/2 nat. size ± .)

1: Métraux--226 E-5 (1929) 1930 SF10 Chiriguano SF10

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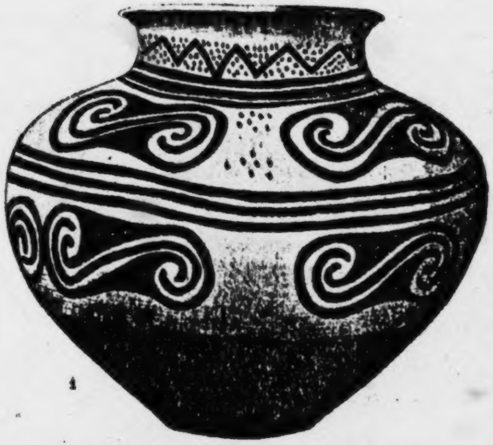
Plate XLVIII



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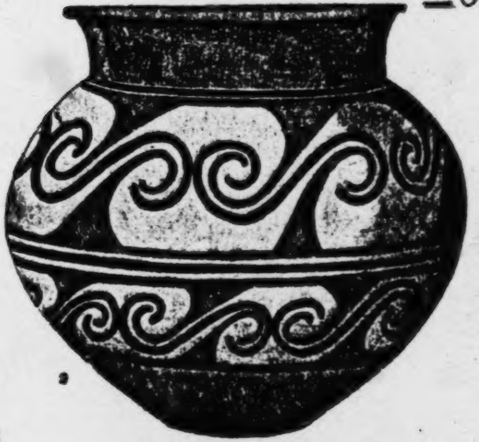
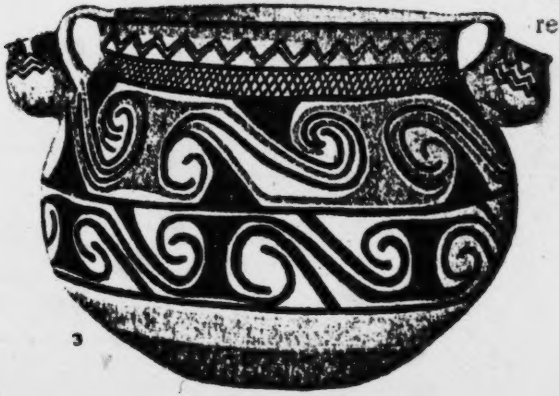


2

Chiriguano vessels (yambuí). Prov.: 1 and 2, Saladito (upper Pilcomayo); 3, Ibopeytí; 4, Tintapaw (upper Pilcomayo). Colors: red and black motifs on white background. (Nos. 1, 2, and 4 = 1/5; 3 = 1/4 nat. size ±.)



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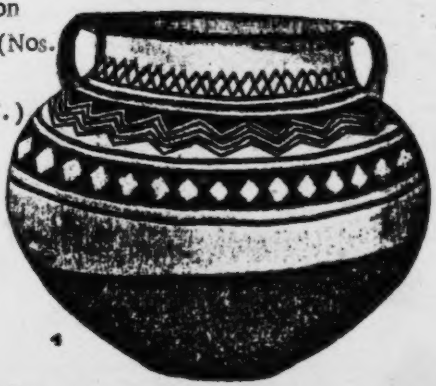

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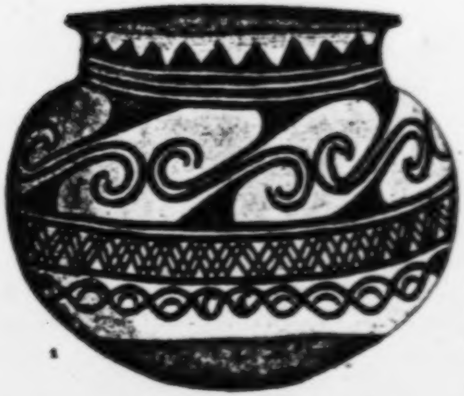
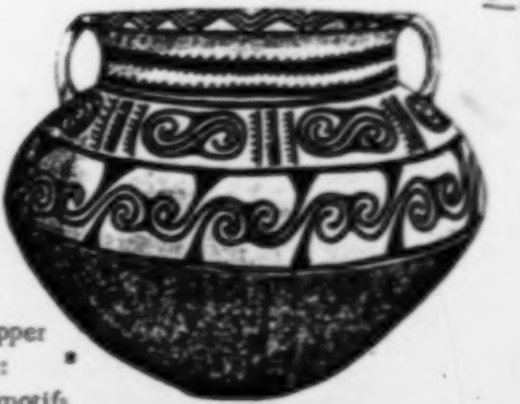
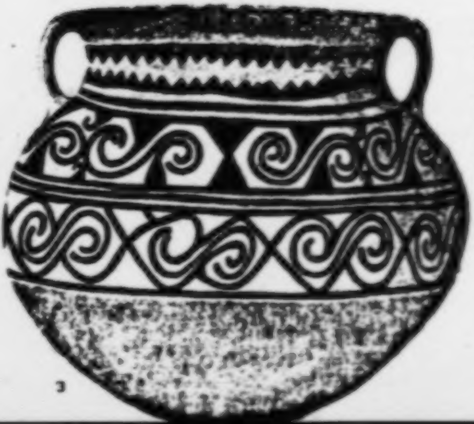
Plate XIIX





Chiriguano vessels (yambuí). Prov.: 1 and 4, Saladito (upper Pilcomayo); 2 and 3, Yumbía (upper Pilcomayo). Colors: 1-3, red and black motifs on creamy-white background; 4, white design on reddish background. (Nos. 1, 2, and 4 = 1/6; 3 = 1/5 nat. size ± .)



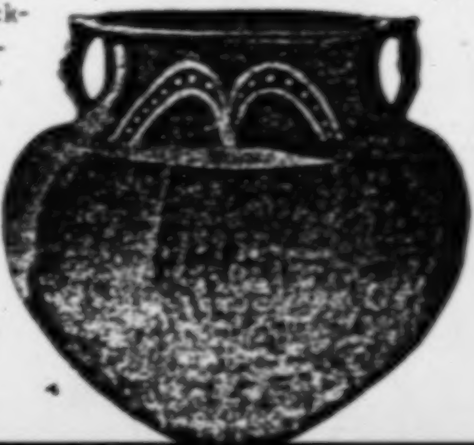
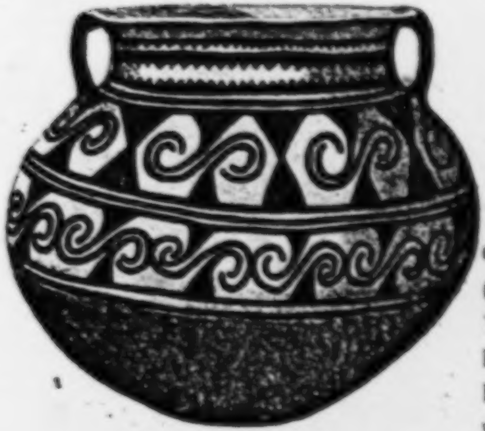
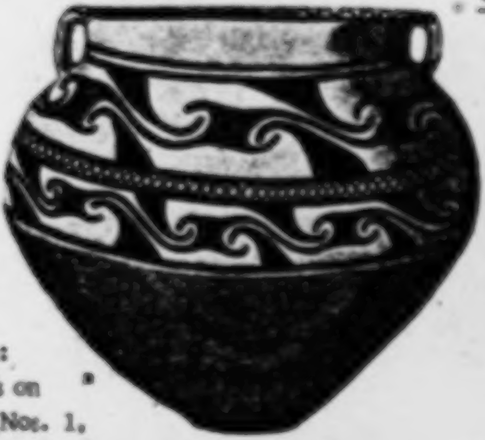


Plate L

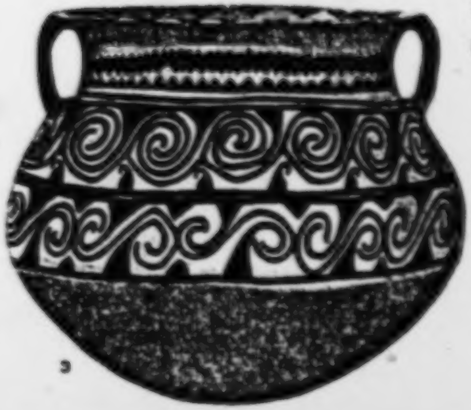


1



2

Chiriguano vessels (yambuí). Prov.: Yumbía (upper Pilcomayo). Colors: black and red motifs on white background. (Nos. 1, 3, and 4 = 1/5; 2 = 1/4 nat. size ±.)



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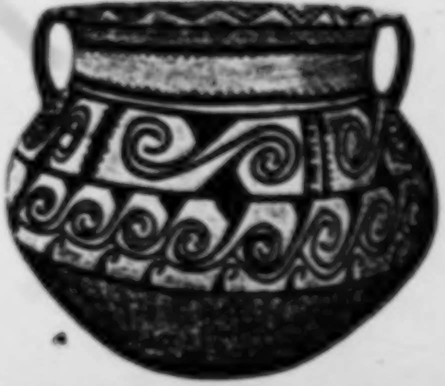

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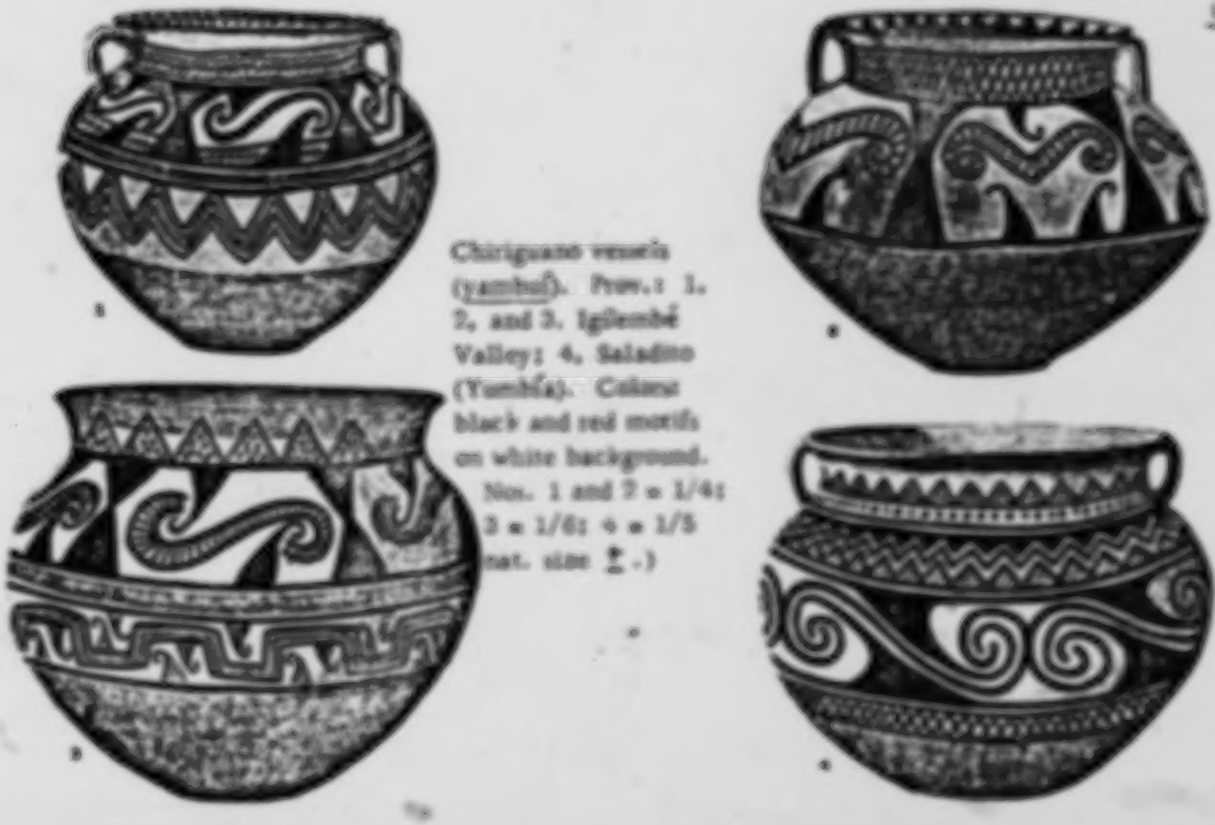
Plate 11



Chiriguano vessels (yambui). Prov.: 1, 2, and 3. Igüembé Valley; 4. Saladito (Yumbía). Colors: black and red motifs on white background.
Nos. 1 and 2 = 1/4; 3 = 1/6; 4 = 1/5 nat. size ? .)

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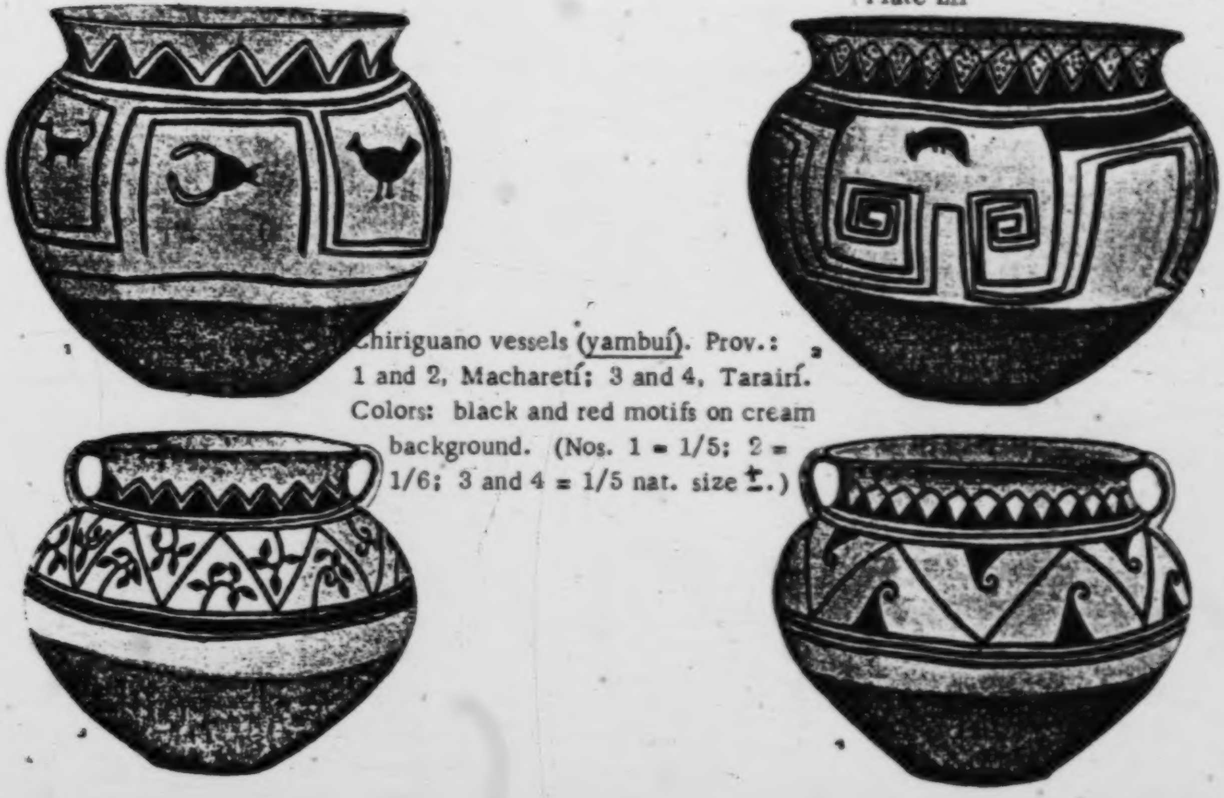
Plate LII



Chiriguano vessels (yambuí). Prov.: 1 and 2, Macharetí; 3 and 4, Tarairí. Colors: black and red motifs on cream background. (Nos. 1 = 1/5; 2 = 1/6; 3 and 4 = 1/5 nat. size ±.)

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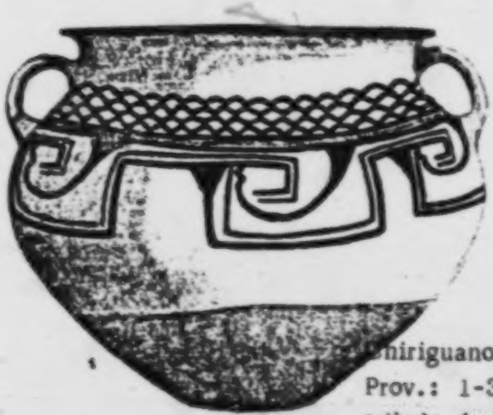
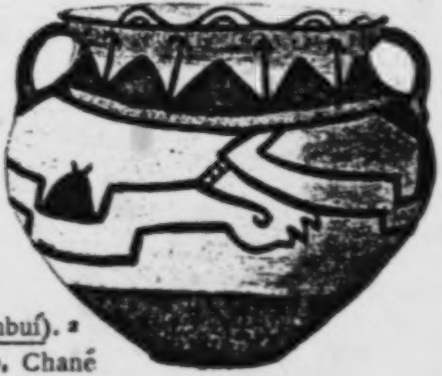
1: Métraux--232 E-5 (1929) 1930 SF10 Chiriguano SF10

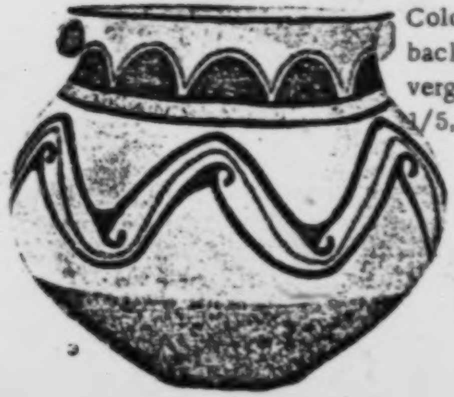
Chane SF8

Plate LIII





Chiriguano and Chané vessels (yambuí). a Prov.: 1-3, Aguaray (Salta Chaco, Chané tribe); 4, Tintapaw (upper Pilcomayo). Colors: red and black on white background; on No. 4 the black verges on brown. (Nos. 1, 3-4 = 1/5, 2 = 1/6 nat. size ± .)



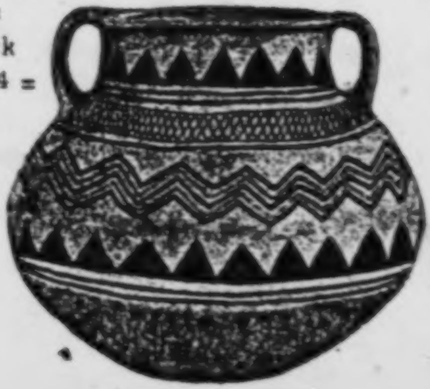


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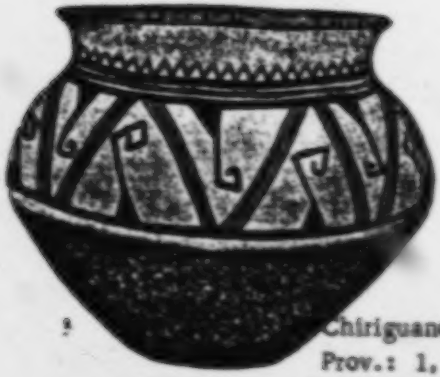
Plate IIV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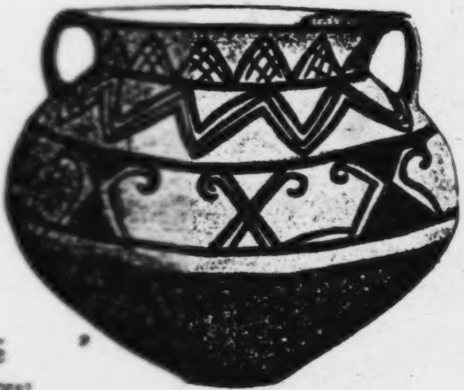
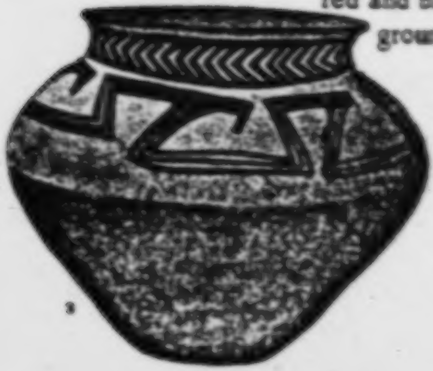

2

Chiriguano vessels (yambuí). Prov.: 1, Tarairí; 2, Igüembé Valley; 3-4, Macharetí. Colors: red and black motifs on cream background. (About 1/5 nat. size.)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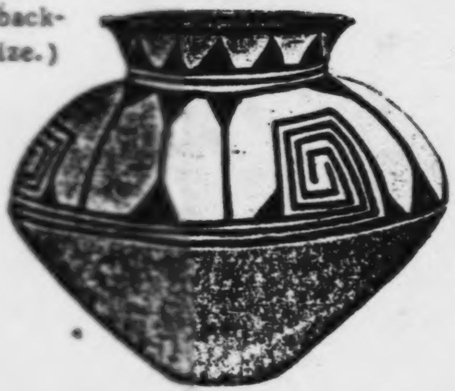
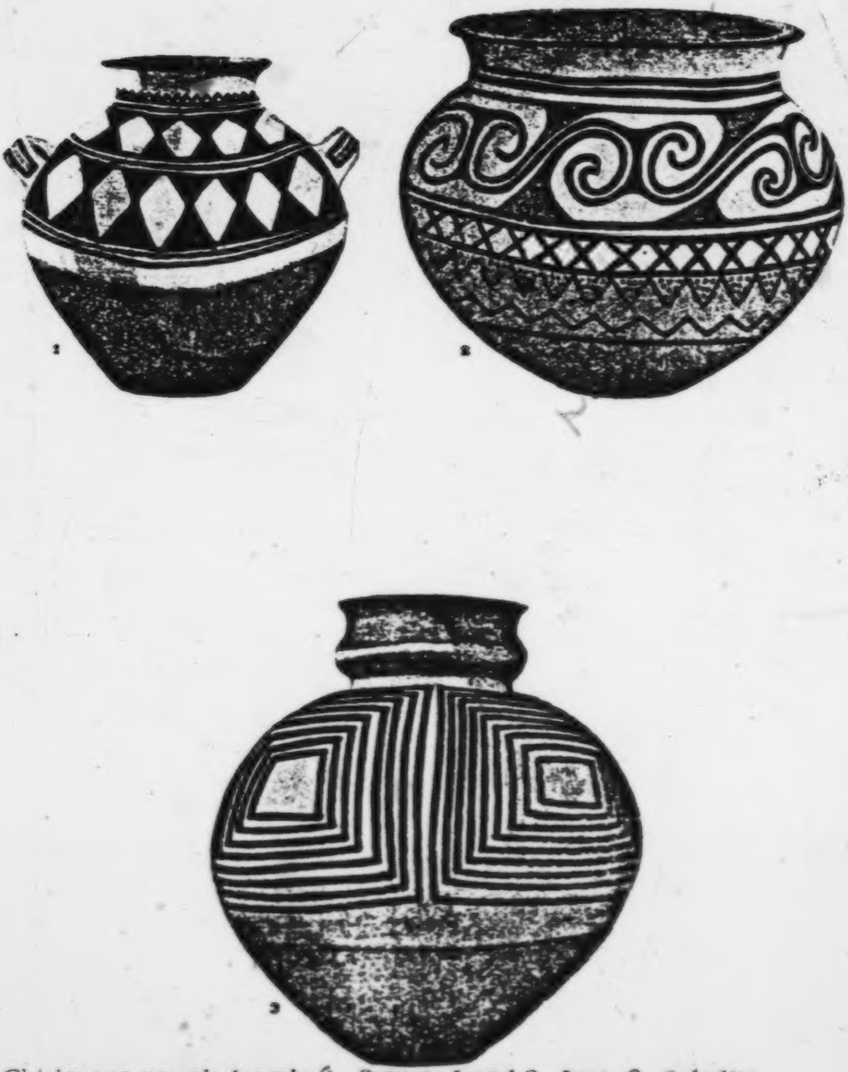
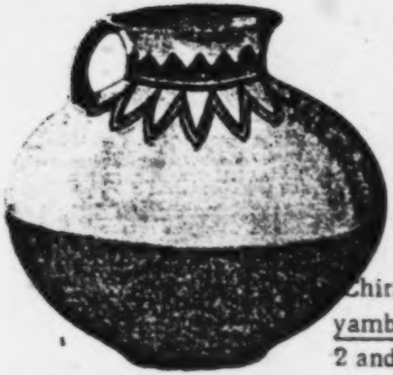

4

Plate LV

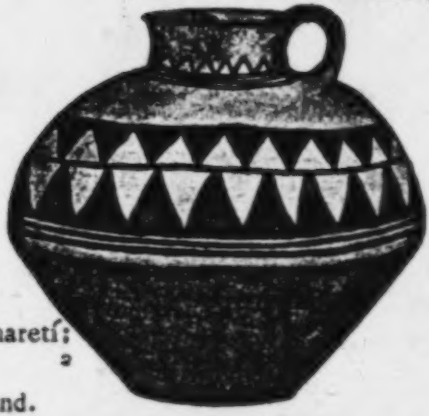


Chiriguano vessels (yambuí). Prov.: 1 and 3, Ivu; 2, Saladito (upper Pilcamayo). Colors: 1 and 2, red and black motifs on cream background; 3, red motifs on white background. (Nos. 1 = 1/7; 2 = 1/6; 3= 1/7 nat. size I.)

Plate LVI



1



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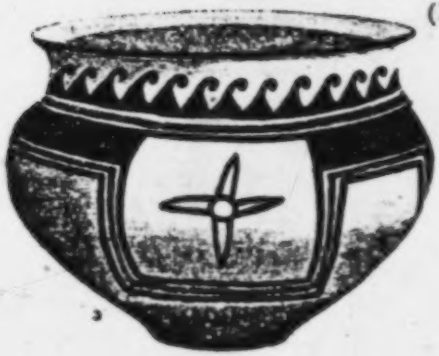

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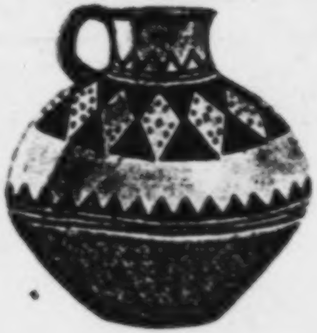

4

Chiriguano vessels (yapepó and yambuí). Prov.: 1 and 3, Macharetí; 2 and 4, Ivu. Colors: red and black motifs on cream background. (1/4 nat. size.)

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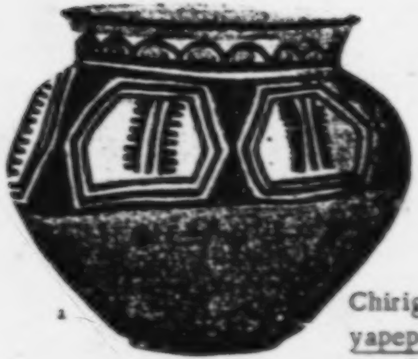
1: Métraux--239 E-5 (1929) 1930 SF10 Chiriguano SF10

Plate LVII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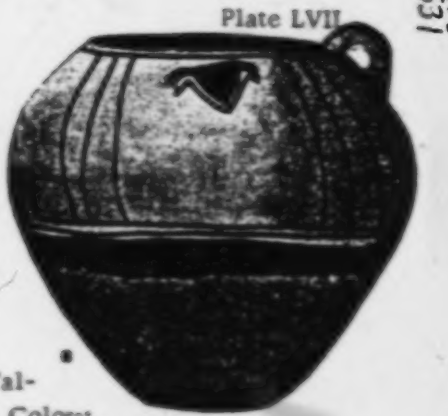
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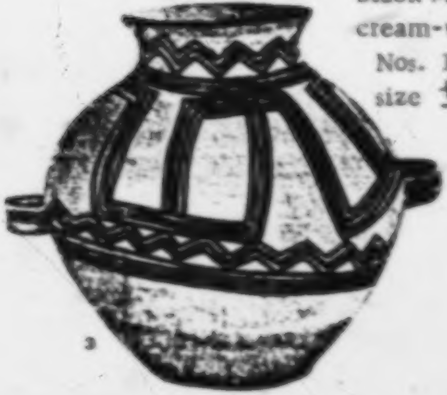
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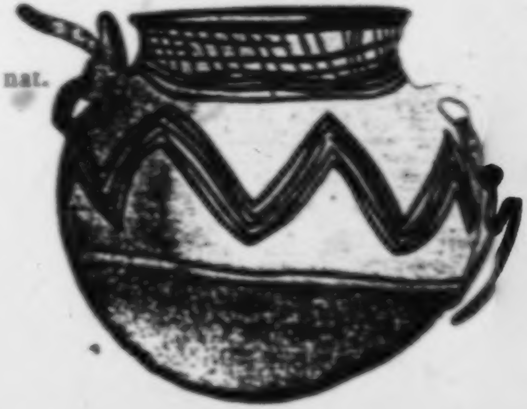
4

Chiriguano vessels (yambuí and yapepó). Prov.: 1, Igũembé Valley; 2, Carurutí; 3 and 4, Ivu. Colors: black and red motifs on cream-white background.
Nos. 1 = 1/7; 2-4 = 1/5 nat. size ± .)

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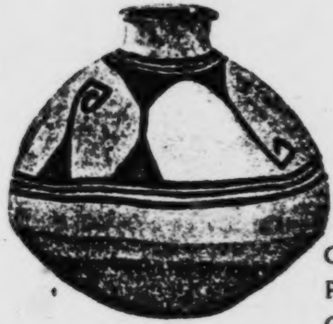
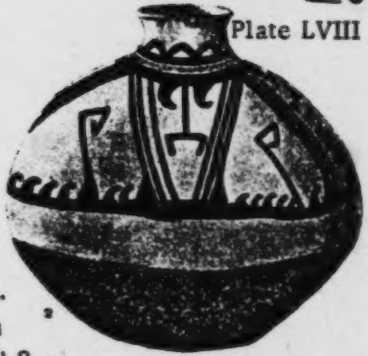
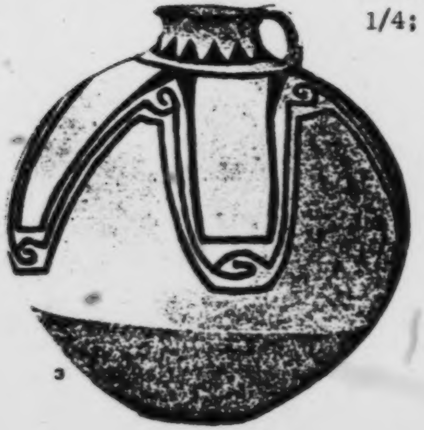
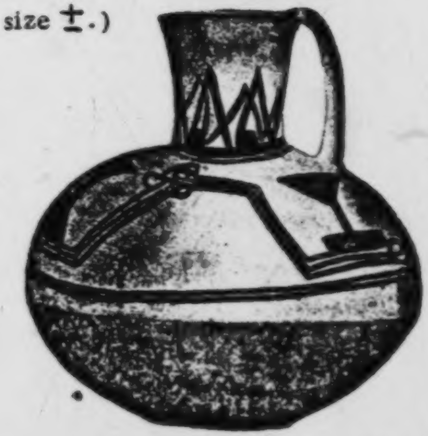
Plate LVIII





Chiriguano vessels (yapepó).
Prov.: 1-3, Macharetí; 4, Ivu.
Colors: red and black motifs on cream background. (Nos. 1 and 2 = 1/4; 3 = 1/6; 4 = 1/4 nat. size ±.)





Prehistoric Argentina SI3
Prehistoric Chile SG3

P.A. /423 cont./

531 Some vessels from the Isla de Tilcara and the Pucará de
C
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171 Tilcara, /424/ as a matter of fact, have a reticulated band on the rim, like our Chiriguano vessels. (Debenedetti, 2, Fig. 45, p. 79, and Bregante, Fig. 164, p. 166.)

PC
531 In Chile we encounter bands, triangles, diamond shapes, reticulated rectangles, and there again the unity of these different cultures in whatever has to do with pottery asserts itself. (Latcham, Figs. 25-28, p. 14, and Bregante, Figs. 232, p. 192.)

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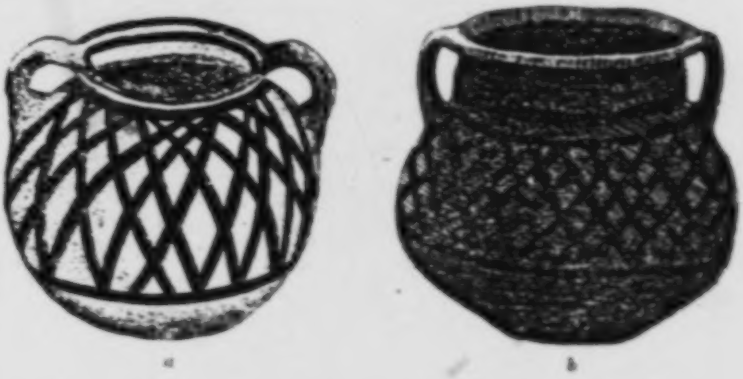

Fig. 82. Vessel b comes from the Chiriguano village of Tintapaw (upper Pilcomayo). It offers an extraordinary resemblance to vessel a from Tilcara. (1/2 nat. size.)

Figs. 25-28, p. 14, and Bregante, Fig. 232, p. 192.)

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171 Checkerwork (Fig. 76). A cup I acquired in the Igüembé valley is decorated in a brown and white checkered design. This is the only example I know in Chiriguano country. In northwestern Argentina this motif has a very wide distribution: it extends from the
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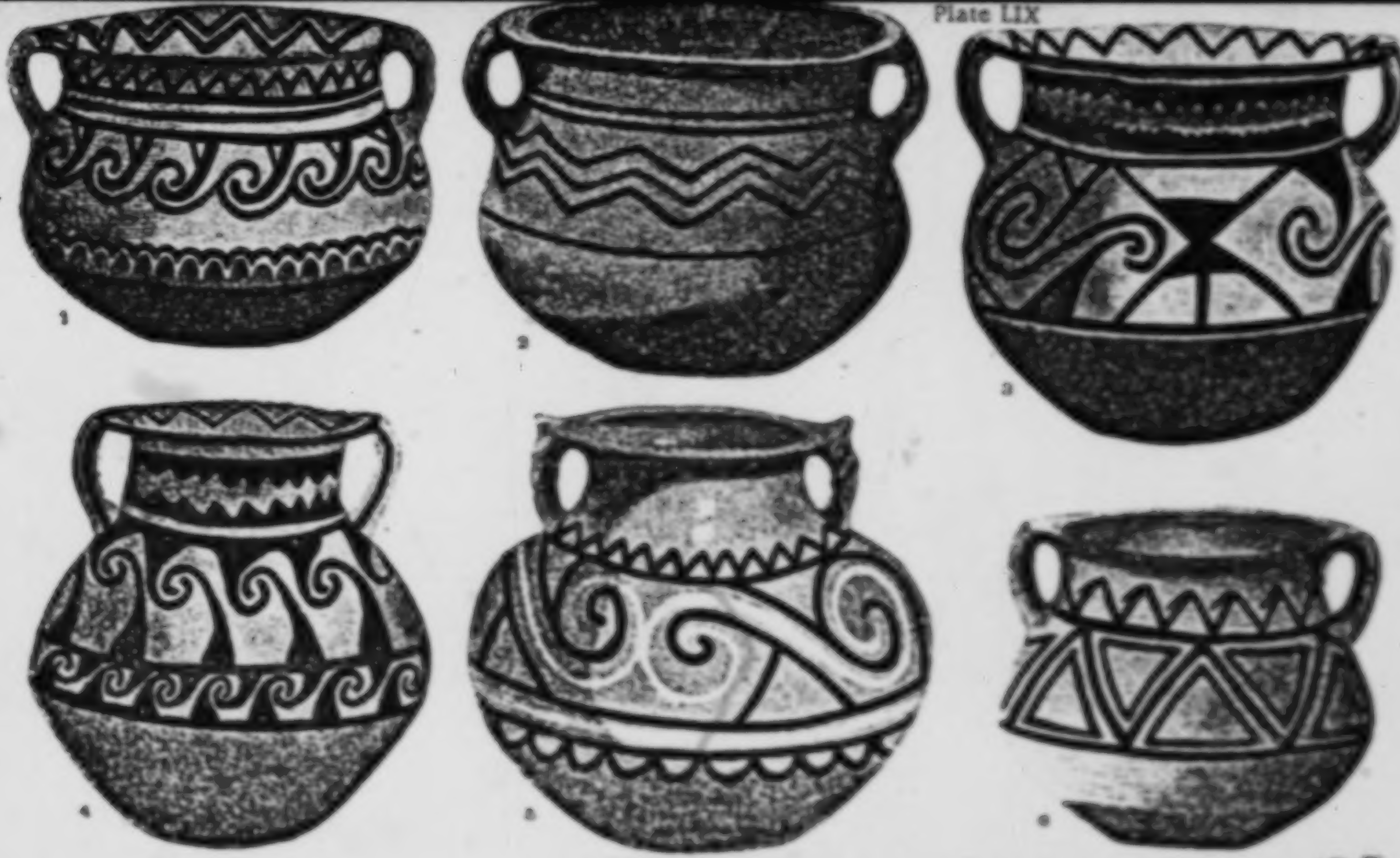
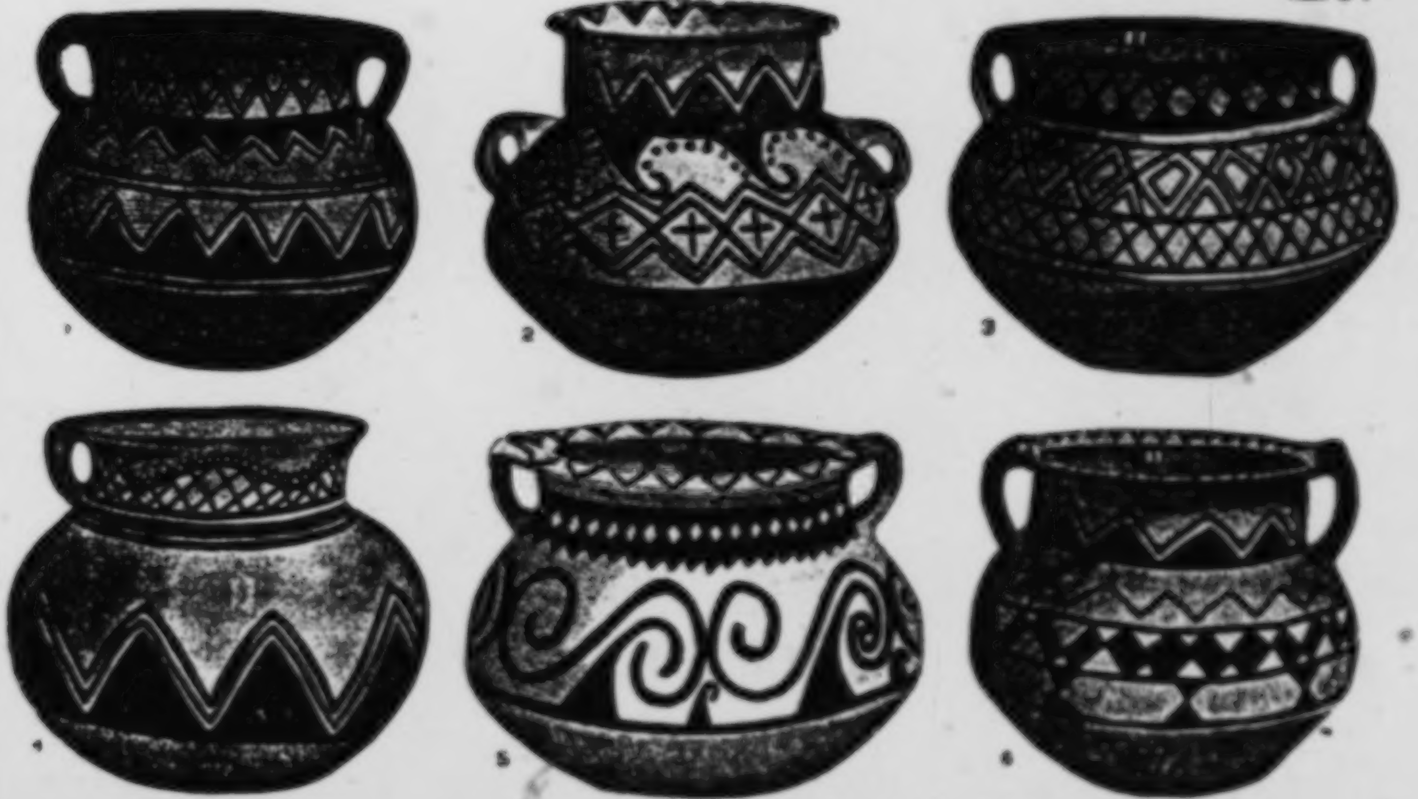
[531]
[171] Quebrada de Humahuaca to San Juan province (Bregante, p. 196). It was common in Chile (Latcham, Fig. 7, p. 7; Fig. 41, p. 18;
PC
[531] Fig. 55, p. 22, etc.). In the post-Columbian period it was still in use among the Araucan of southern Mendoza (Métraux, 6, Fig. 12, p. 80).

Plate LIX



/Caption for above plate on p. 546./

Plate LX



/Caption for above plate on p. 146./

/Captions for Plates LIX and LX, pp. 344 and 345./

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LIX Miniature Chiriguano vessels (*yapepoxai*) (serve as containers). Prov.: 1, 3, and 4, Tumbía; 2 and 6, Ibopeytí; 5, Saladito (upper Pilcomayo). Colors: red and black motifs on white background; 5, red background. (Nos. 1-3 = 1/2 approximately; 4 = 2/5; 5 = 2/5; 6 = about 1/2 nat. size.)

LX Miniature Chiriguano vessels (*yapepoxai*). Prov.: 1, Ibopeytí; 2, Tiwiraiti (upper Pilcomayo); 3, Tintapaw; 4, Caipipendí; 5, Tumbia; 6, Tintapaw. Colors: red and black motifs on cream background, with the exception of No. 3, decorated with black motifs on reddish background. (Nos. 1 = 1/3; 2-6 = about 2/5 nat. size.)

Plate 130

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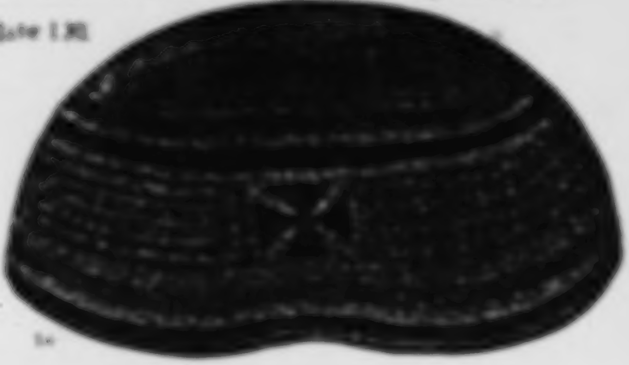
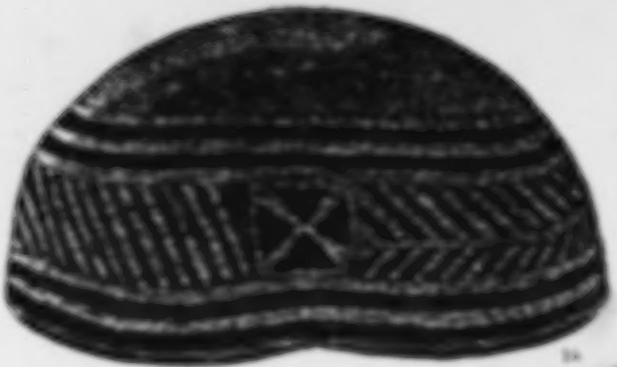
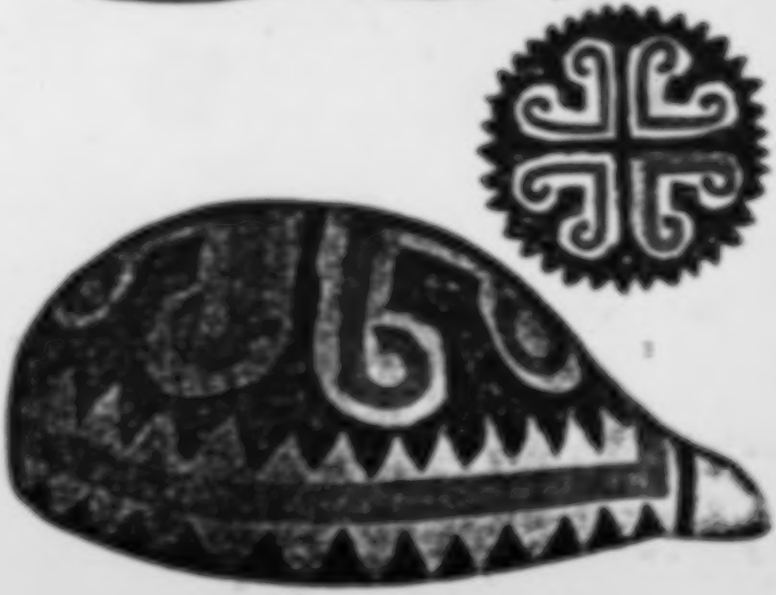


1a



1b



2

/See p.265 for caption./

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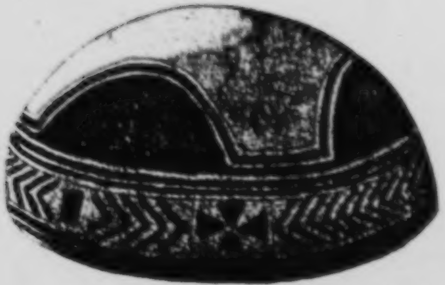
1: Métraux--253 E-5 (1929) 1930 SF10 Chiriguano SF10

Diaguita SG6

Plate LXII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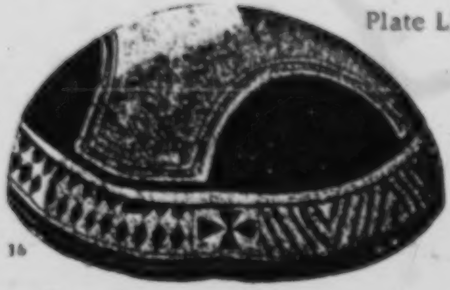
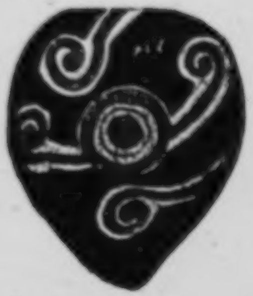

1b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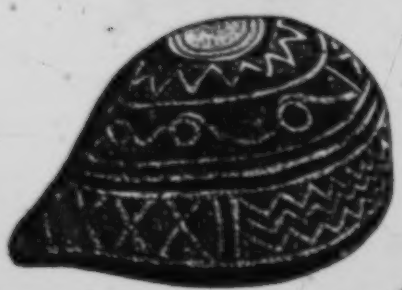
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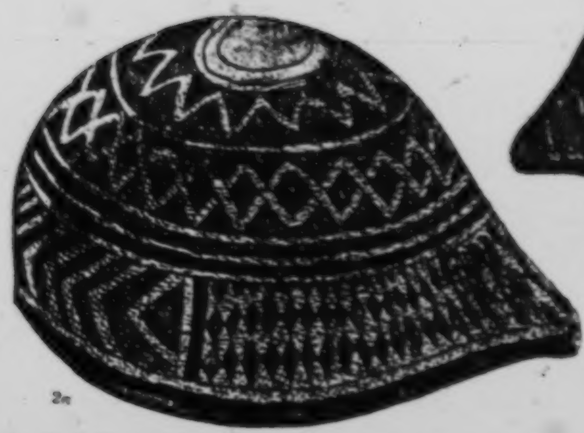
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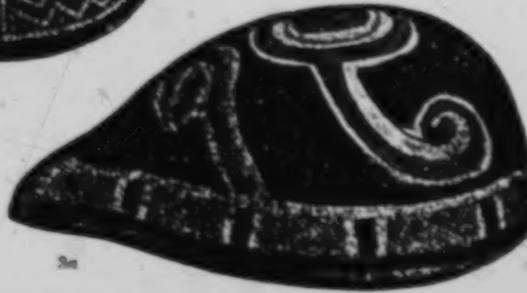
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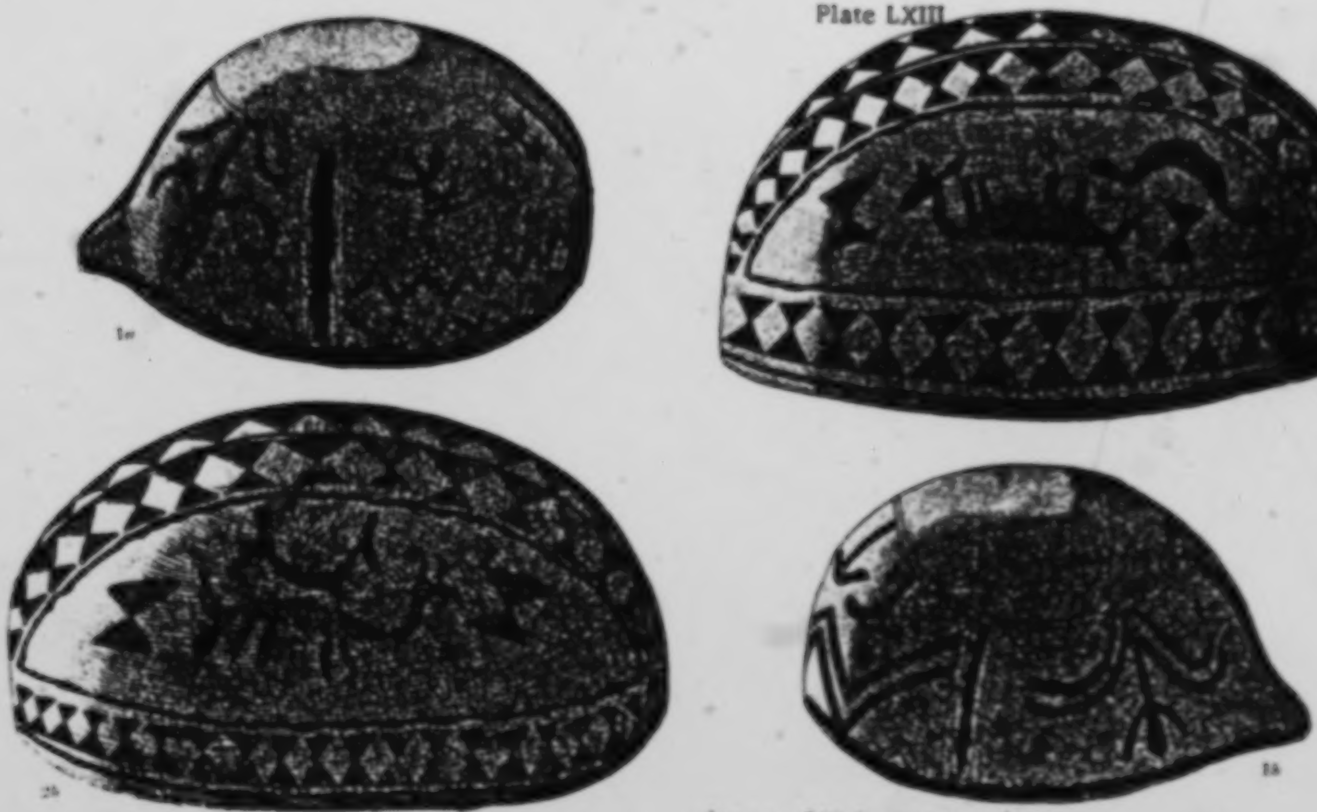
Plate LXIII



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[402]

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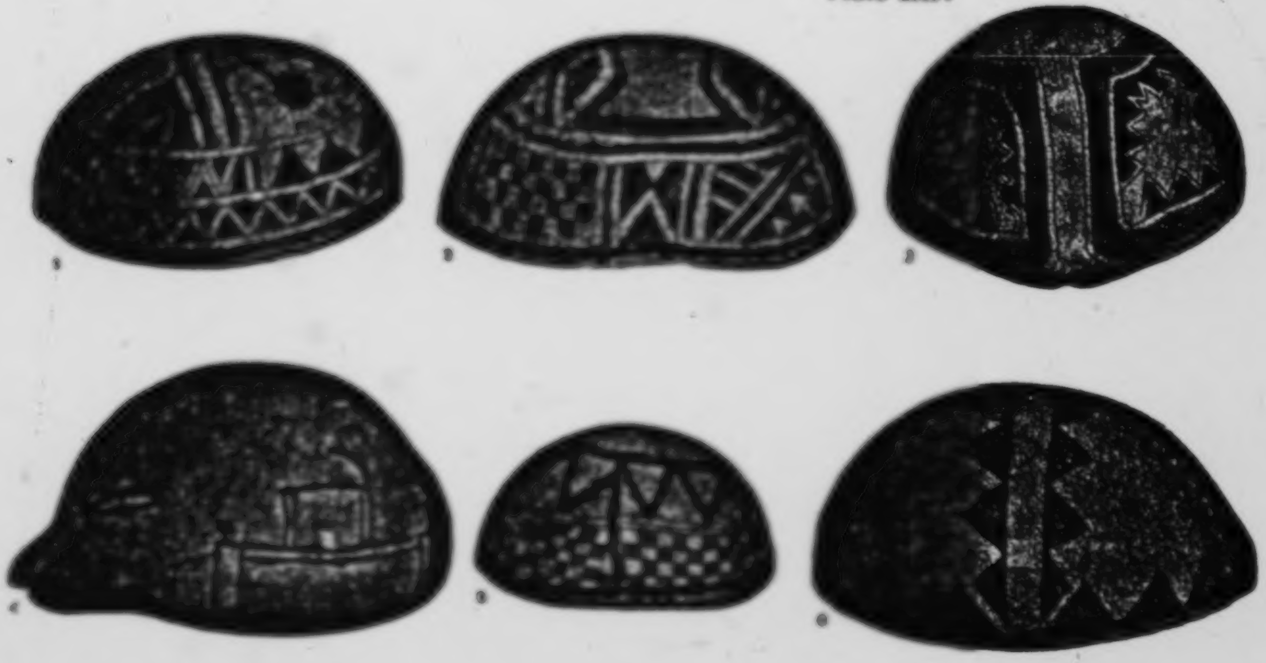
1: Métraux--255 E-5 (1929) 1930 SF10 Chiriguano SF10

Plate LXIV



/See p. 703 for caption./

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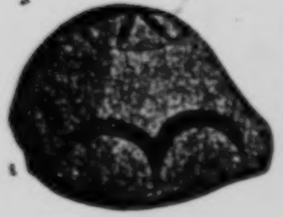
Plate LXV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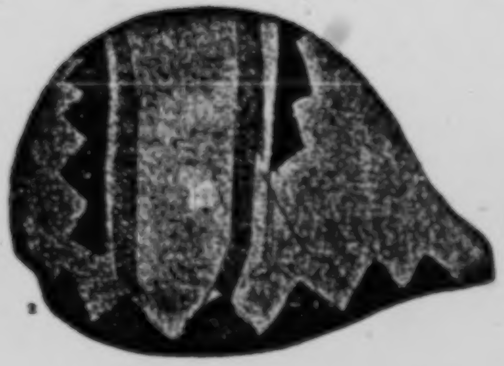
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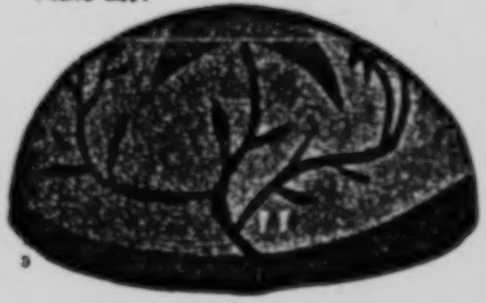
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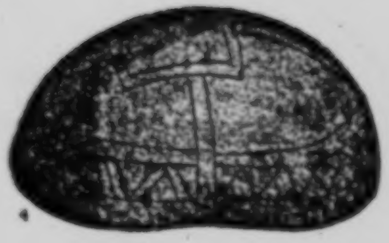
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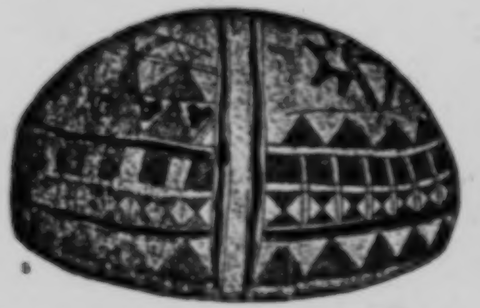
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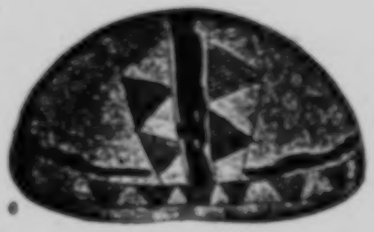
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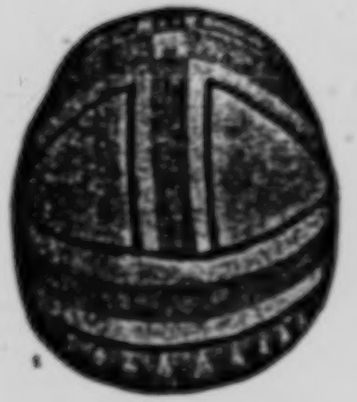
Plate LXVI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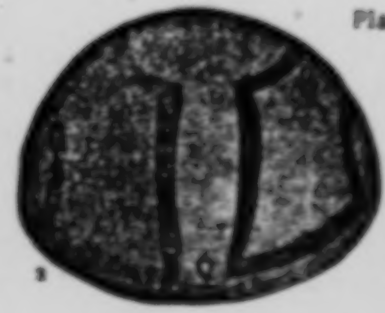
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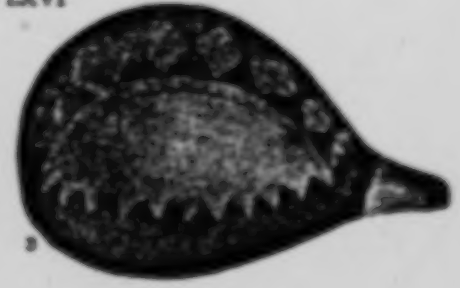
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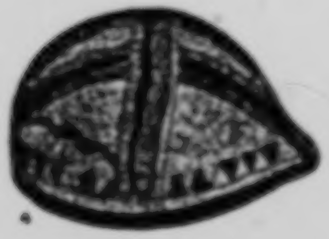
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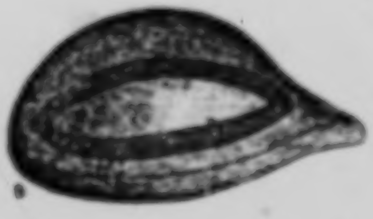
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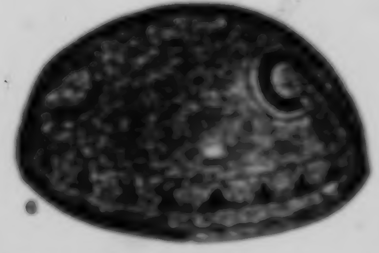
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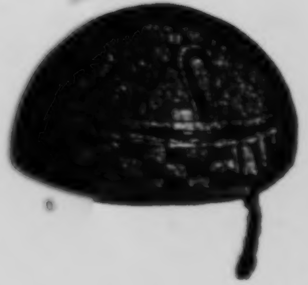
Plate LXVII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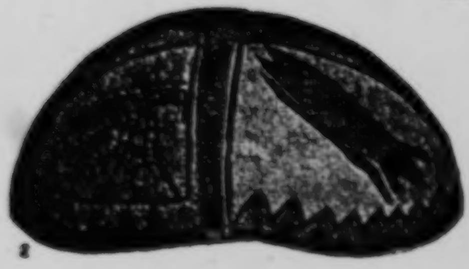
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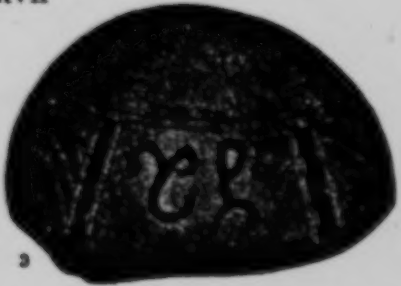
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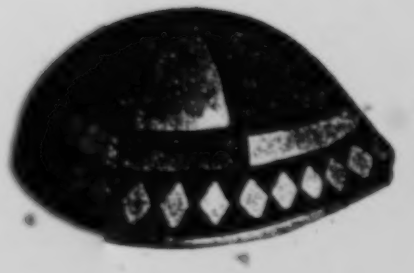
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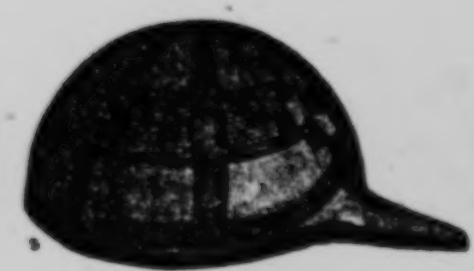
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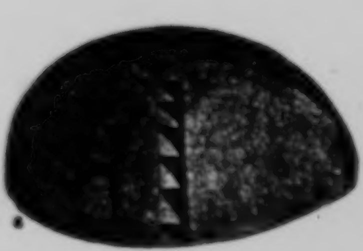
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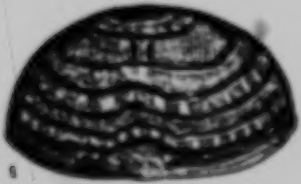
Plate LXVIII



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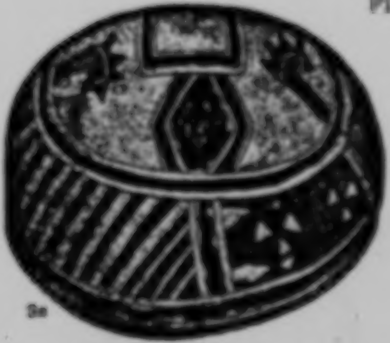

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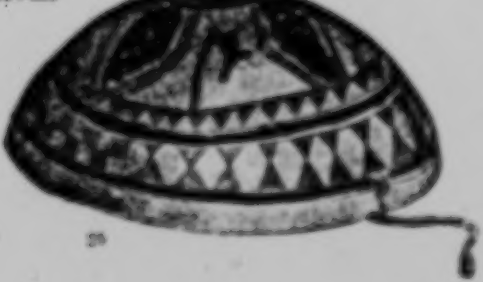

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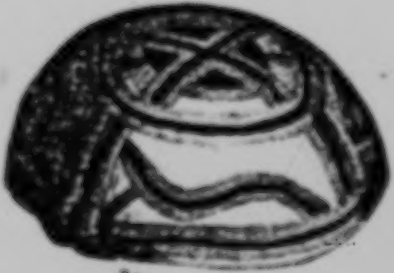

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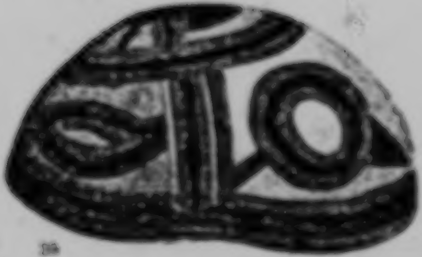

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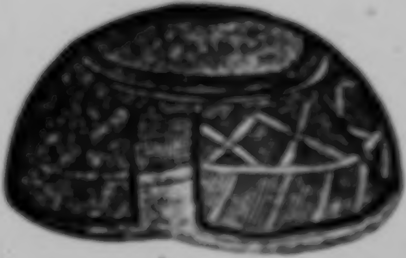

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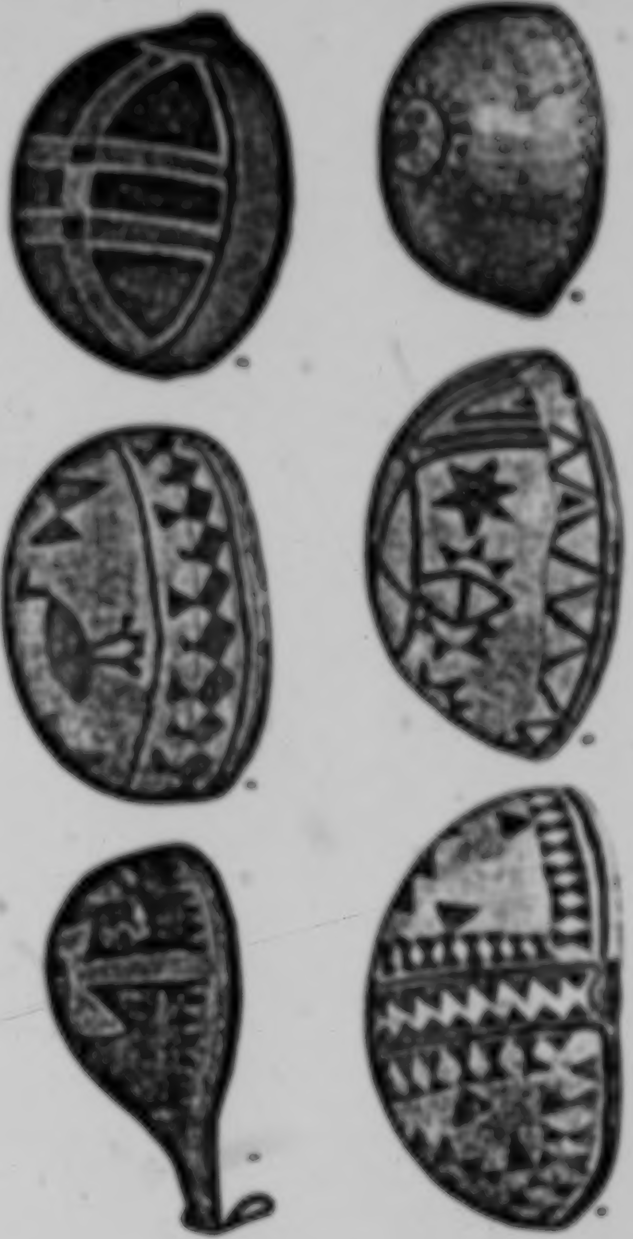
[109]

Plate LXIX



[108]

/See p. [illegible] for caption./

Plate LXX

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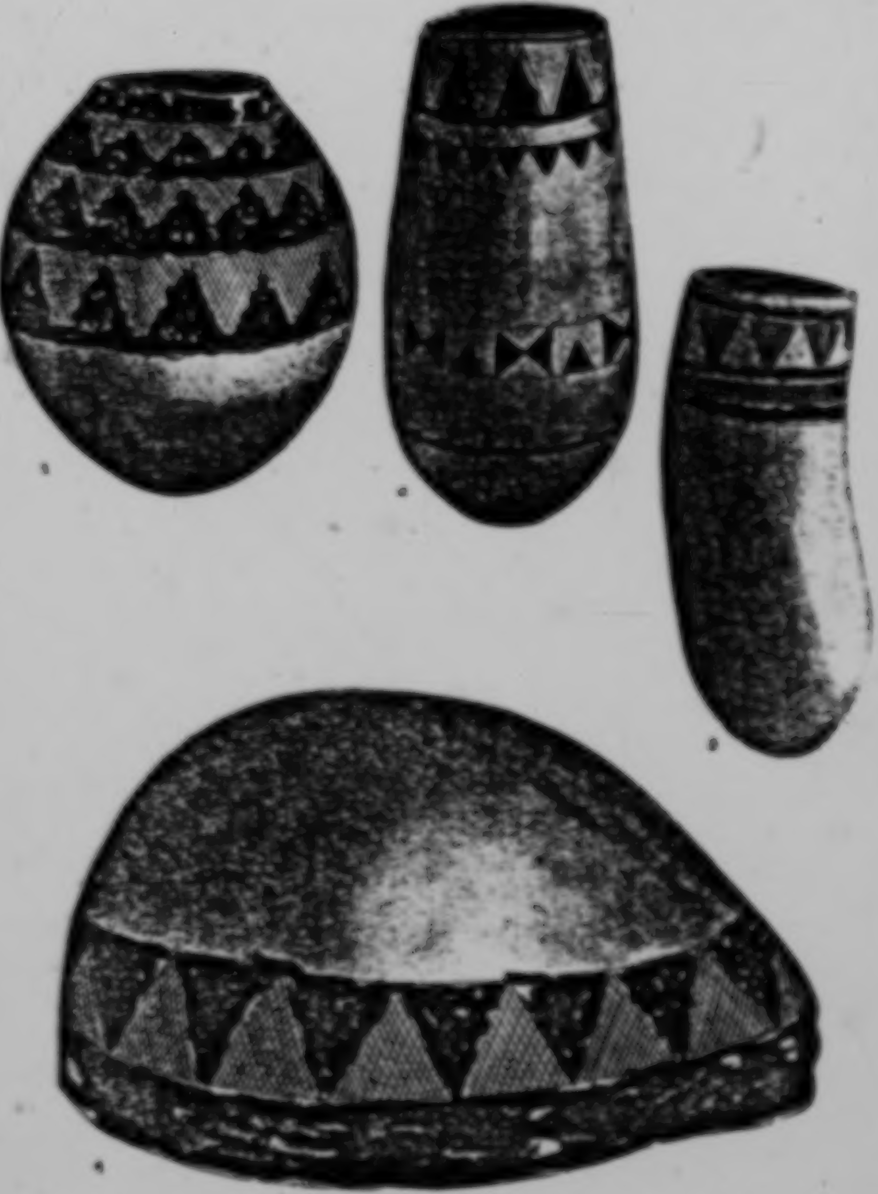

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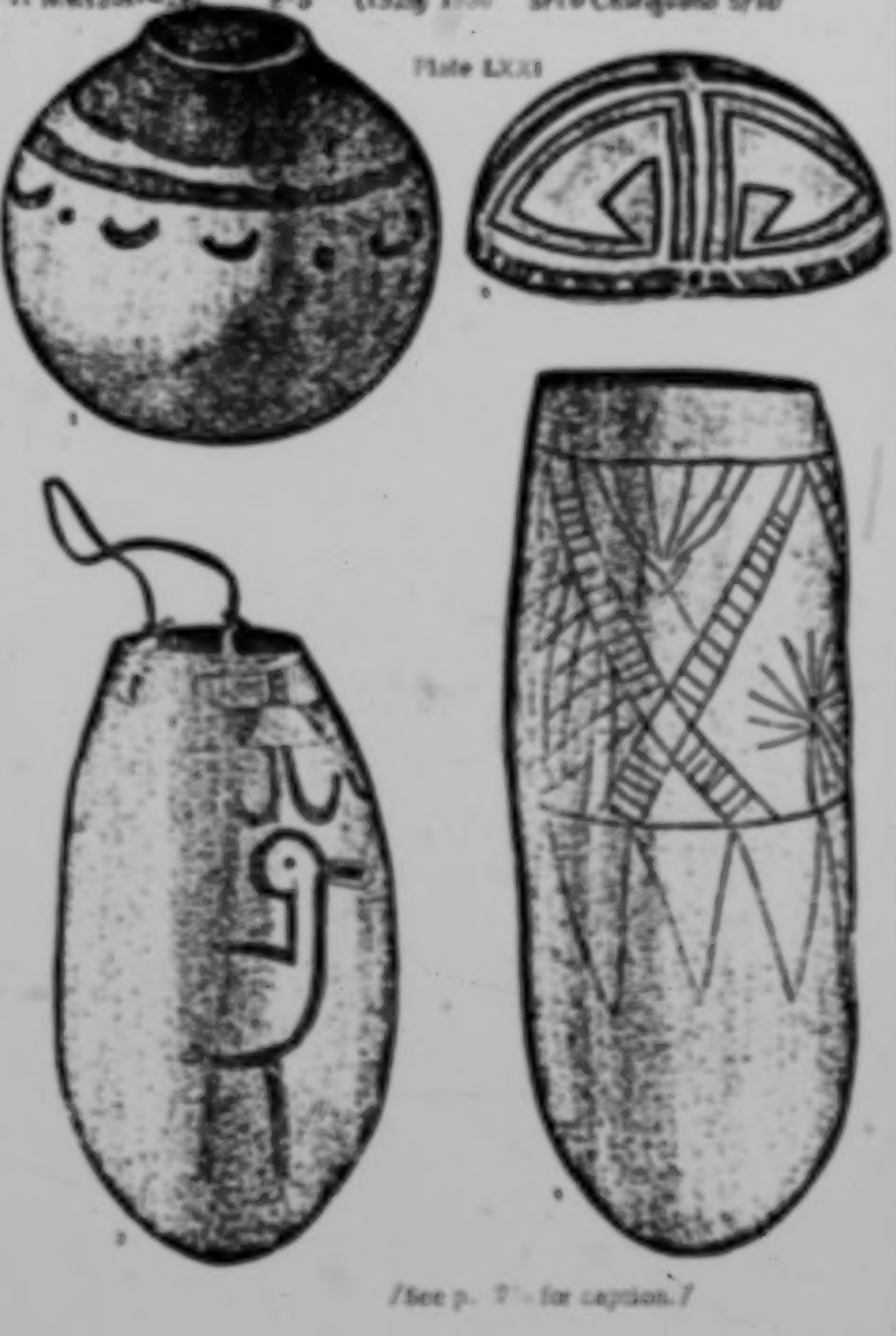
Plate LXXI



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1: Métraux--263 E-5 (1929) 1930 SF10 Chiriguano SF10
Diaguita SG6

/Captions for Plates LXI-LXXX, pp. 212-262./

● C 415 531

LXI Pyrographed and incised calabashes. Chiriguano. Prov.: 1a and b, Saladillo (upper Pilcomayo); 2, Ivu. (No. 1 = 1/3 nat. size; 2 = 1/2.5 nat. size.)

LXII Engraved and pyrographed calabashes. Chiriguano and Diaguite. Prov.: 1 a and b, Saladillo (upper Pilcomayo); 2 a and b, Isirié (upper Pilcomayo); 3 a and b, calabash found in a funerary chamber (boveda) of the ancient Diaguite in "La Quebrada" (Valle del Cajón, Catamarca Province). This calabash was beside an adult skeleton. (Nos. 1 a = 1/2; 2 a and 3 a = 2/3 nat. size±.)

D [415] [531]

LXIII Incised and pyrographed calabashes. Chiriguano. Nos. 1 (a and b) and 2 (a and b) come from the Macharetí mission. Engraved motifs: 1, human personage and birds; 2 a, dog (?); 2 b, llama. (1/2 nat. size±.)

LXIV Incised and pyrographed calabashes. Chiriguano. Prov.: 1, Masaví (Igüembé Valley); 2, Achua (upper Pilcomayo); 3, Caruruti; 4, Macharetí; 5, Tiwiraití; 6, Caipipendí. Remarks: Note the mark of ownership on Calabash 4. (Nos. 1 and 3 = 1/2; 2 and 4-6, 1/3 nat. size±.)

C [422]

LXV Incised, pyrographed, and painted calabashes. Chiriguano. Prov.: 1, Tigüipa; 2 and 6, Macharetí; 3, Ivu; 4, Saladillo; 5, Tiwiraití (upper Pilcomayo). Remarks: Calabash No. 3 is painted with roucou. (About 1/2 nat. size.)

LXVI Incised, pyrographed, and painted calabashes. Chiriguano. Prov.: 1, Santa Rosa; 2, Mangarati; 3 and 6, Caipipendí; 4, Masaví; 5, Caruruti. Remarks: All the lower part of 3 is painted with roucou. (1/2 nat. size.)

415
531 /Captions for Plates LXI-LXXI, pp. 252-262 cont./

LXVII Incised, pyrographed, and painted calabashes. Prov.: 1, Caratindi (Igüembé); 2 and 6, Macharetí; 3, Tiwiraiti; 4, Tintapew (upper Pilcomayo); 5, Caipipendí. Remarks: On No. 3, more or less deformed numbers. Calabash No. 4 is painted, pyrographed, and incised. (Nos. 1-3 and 5 /sic/ = 1/2; 4-5 /sic/ = 1/3 approximate nat. size.)

LXVIII Incised and pyrographed calabashes. Prov.: 1, Ñawirenda; 2 a and b, Caratindi (Igüembé Valley); 3 a and b, Yumbía; 4, Ibopeytí. Remark: On No. 3 a and b a very stylized bird has been represented. (Nos. 1-3 = 1/2; 4 = 1/3 approximate nat. size.)

LXIX Pyrographed and incised calabashes. Chiriguano. Prov.: 1 and 3, Caipipendí; 2 and 4, Macharetí; 5, Tiwiraiti (upper Pilcomayo); 6, Ñawirenda (upper Pilcomayo). Remarks: Calabash No. 1 is decorated with a series of engraved numbers going from 1 to 10; Calabash No. 6 with motifs clearly European in inspiration. (Nos. 1, 3, 5, and 6 = 1/2; 2 and 4 = 1/3 approximate nat. size.)

[§21]
[199]

LXX Incised and pyrographed calabashes. Chiriguano. Prov.: 1 and 4, Tarairi; 2, Macharetí; 3, Caipipendí. (Nos. 1 and 2 = 1/2; 3 = 1/2; 4 = 1/3 approximate nat. size.)

LXXI Painted, incised, and pyrographed calabashes. Prov.: 1, Ivu; 2, Igüembé; 3 and 4, Caipipendí. (Nos. 1-3 = 1/2; 4 = 1/3 approximate nat. size.)

/429 cont./

531 171 On almost all the calabashes in my collection, pyrographed designs alternate with incised motifs. Perhaps it is the same with the calabashes of the Andean region. Judging from the excellent photographs which Boman (2, Vol. II, Plate LXXVI) [114] gives us of them, and from /430/ the specimen from the Calchaqui valley which I am publishing here, this scholar erroneously considers them as having been entirely pyrographed. When a Chiriguano incises a design with a knife on a calabash, he is always careful to fill the engraved lines with ashes to make them stand out. At first sight this process may be confused with true pyrography.

415 531

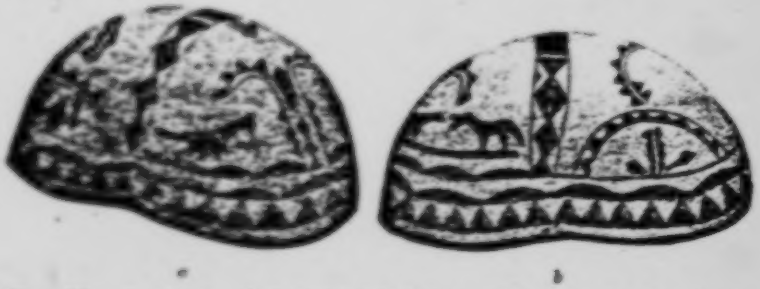

Fig. 85. a and b. Engraved calabash. Only the rim has been lightly pyrographed. On one side (a) is seen a feline animal (jaguar or puma), on the other (b) a fox (?) and a bird. Prov.: Masaví (Igüembé Valley). (About 1/2 nat. size.)

531 A single glance at Plates LXI-LXXI allows one to realize that pyrography and engraving on calabashes do not obey such rigid stylistic rules as pottery. These calabashes differ very much, and there are scarcely any motifs that seem to be preferred to others. To what is this diversity due? I believe it artificial; and I am convinced that formerly this art followed precise norms, in a word, that in times past there was a true style of pyrography and engraving on wood. How would one explain otherwise that precisely the most beautiful pieces in my collection are at the same time the oldest and the most similar to the Andean prototypes (Plate LXI, 1 and 2; LXII, 1 and 2; LXIV, 2; LXVIII, 2 and 3, etc.)? Let us not forget that

Chane SF8

C /431 cont./

531 by taking off the epidermis which covers it, except at the places
322 which are to remain uncolored. Then they smear its exterior
386 surface with roucou and scrape the tegument where they have
saved it. The figures then stand out in red against a yellowish
background. An analogous process is in use among the Pauserna
COO (Nordenskiöld 5, p. 344). The motifs decorating most of the

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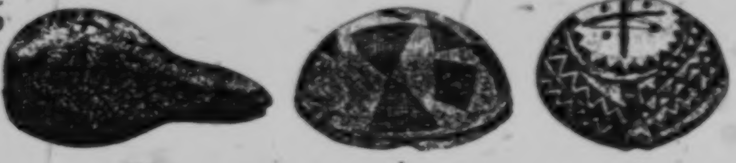


Fig. 86. a, b, and c. Miniature calabashes, "liqueur glasses" and children's toys. Chiriguano and Chané. Prov.: a, Tuyunti, near Aguaray (Salta Chaco); b, Ñawirenda (upper Pilcomayo); c, id. (About 1/2 nat. size.)

C
531 The motifs decorating most of the
painted calabashes I collected in Ivu are unfortunately very
177 much influenced by European models, and beside very pretty
designs one finds others of the most distressing banality.

/448 cont./

Description of baskets in "wicker work"

285 Figure 104. Length, 20 centimeters; width, 14 centimeters; height, 14.5 centimeters. Provenance: Ibopeyti (upper Pilcomayo region).

This little basket was made by the technique called wicker work, that is, the woody stems constituting it were intermingled in [415] → such a way that the elements of the woof pass alternately above and below those of the warp. There are ten of the latter: four go in the transverse direction and six in the longitudinal. They are crossed over and held by the stalks of the woof. Plate LXVIII gives a very exact idea of the technique I have just tried to define.

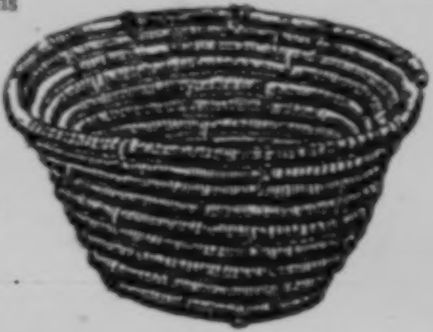
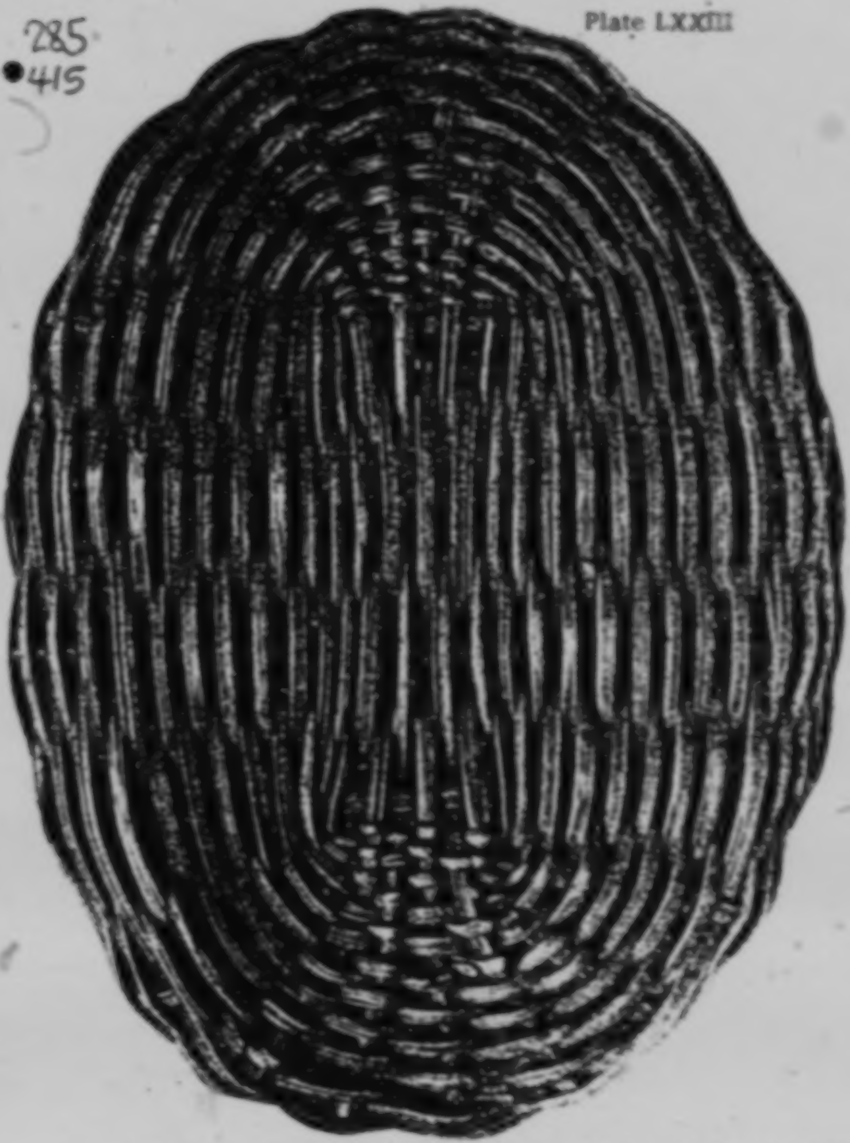


Fig. 103. Small basket in spiral basketry (coiled basketry). Bought at La Quiaca. (2/3 nat. size.)

The fibrous stalks which constituted the warp and went far beyong the rim of the basket were bent back in an arc and fastened into the fabric. They were slipped into it beside another element of the warp after /449/ crossing the neighboring element (see Fig. 105 /see p.295 /). Because of this, the little sides of the basket seen in Figs. 104 and 105 seem to be formed by a warp of which each element is double. The rim is regular and strong.

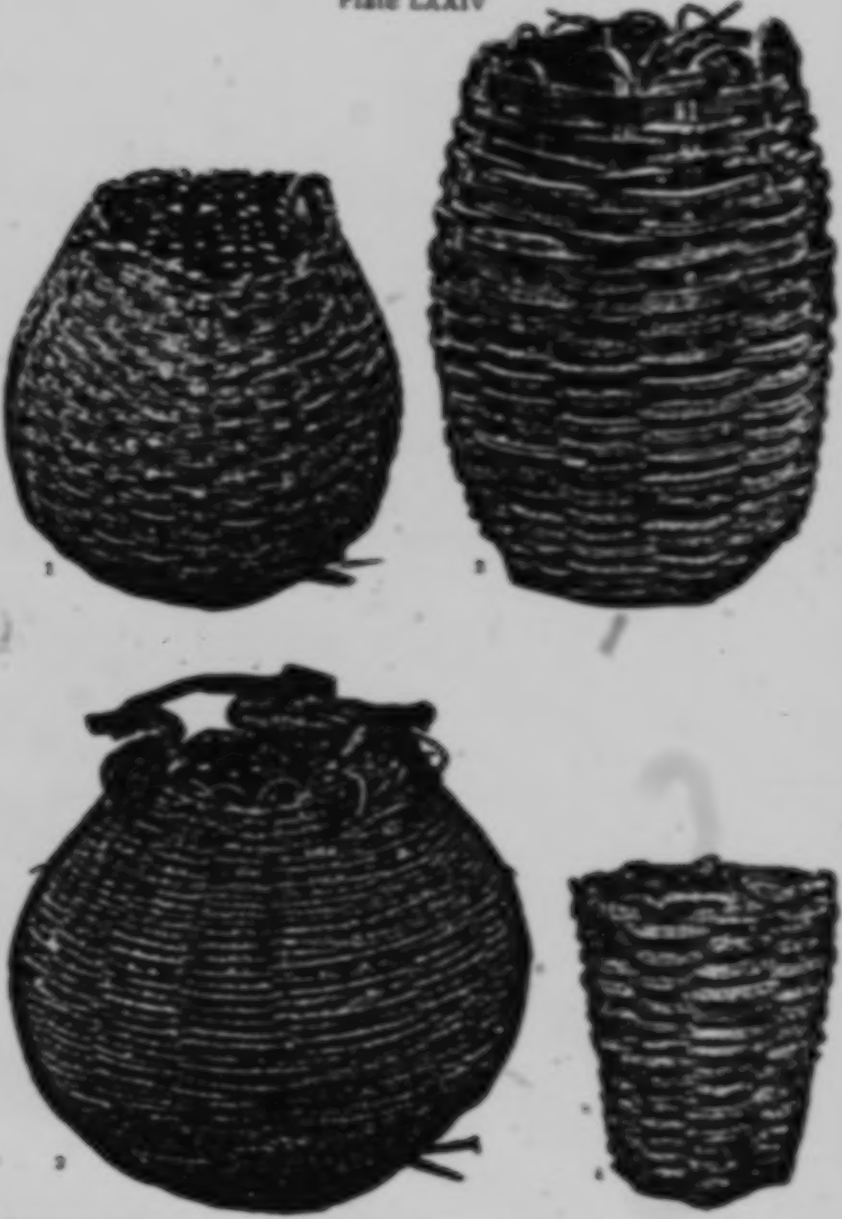
The basket is provided with a suspension cord of vegetable fibers. I do not know the scientific or common name of the plant from which the stalks used in the plaiting of this basket were taken. They are flat, regular, and rectangular in cross-section.

Plate LXXIII



Base of the basket of Fig. 104, indicating the detail of its technique.

Plate LXXIV



Chiriguano baskets in wicker work. Prov.: 1. Saladito (upper Pilcomayo)
2 and 3, Ivu; 4. Tintapaw (upper Pilcomayo). (About 1/2 nat. size.)

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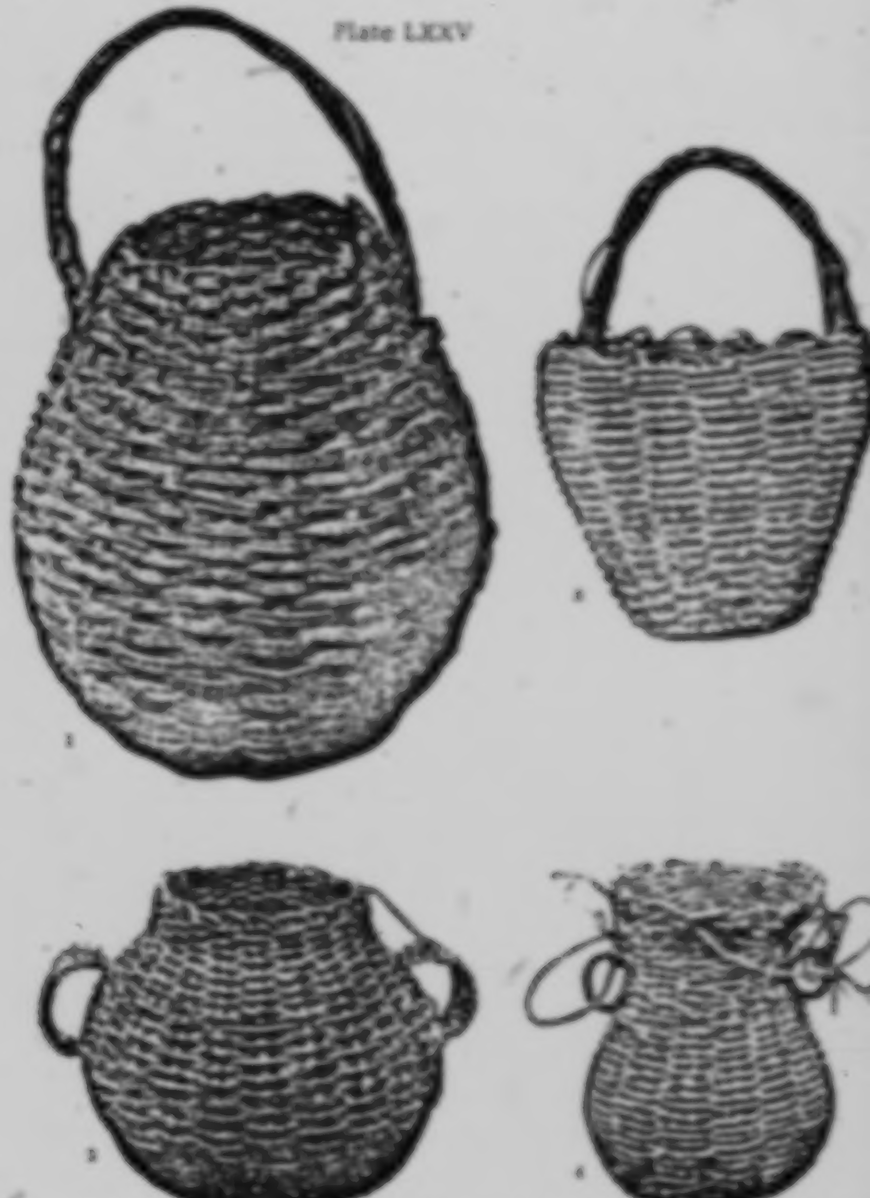
Plate LXXV



Chiriguano baskets. Prov.: 1. Timboy (upper Pilcomayo); 2. Ibopeytí:
3. Ñ[illegible] (upper Pilcomayo). (About 1/2 nat. size.)

Plate LXXVI

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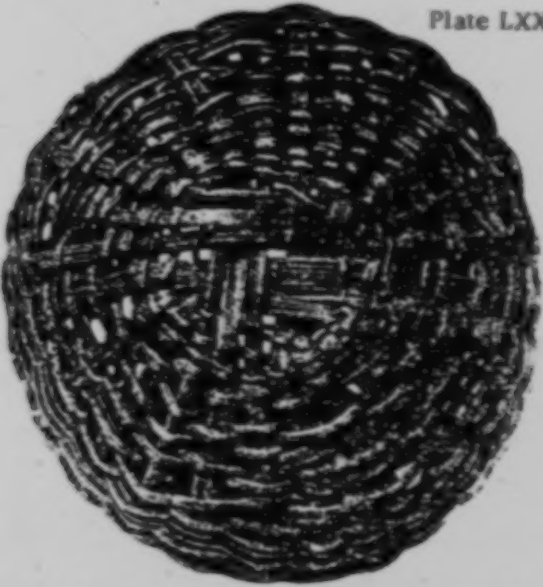

1. Base of the basket of Plate LXXIV, 1.

2. Base of the basket of Plate LXXV, 2.

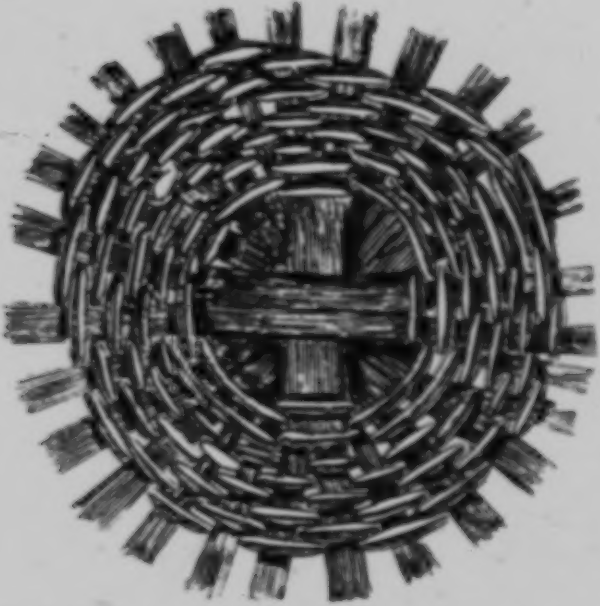

Fig. 106. Detail of the technique of the bottom of of the basket of Plate LXXIV, 3.

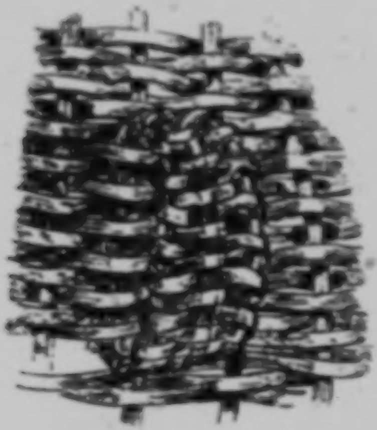

Fig. 107. Detail of the handle of the basket of Plate LXXV, 2.

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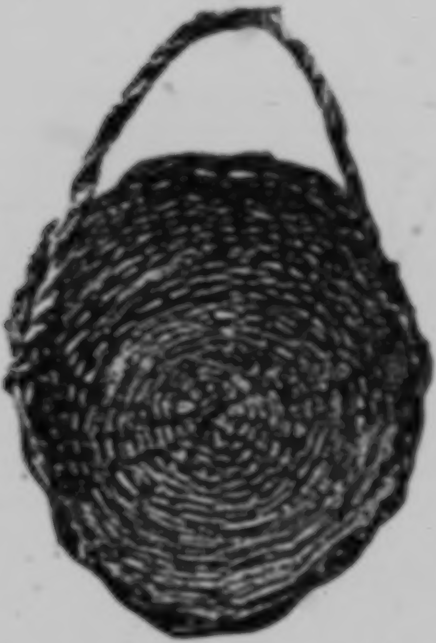
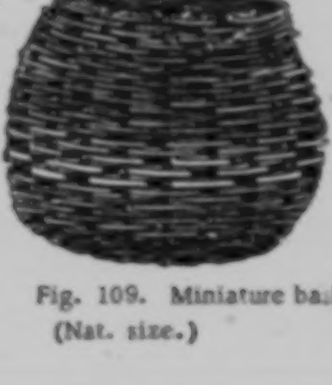


Fig. 108. Basket in wicker work in imitation of those of the half-breeds. Prov.: Ivu.
(About 1/4 nat. size.)



[524]

Fig. 109. Miniature basket (child's toy).
(Nat. size.)

/456 cont./

285 294 A half-finished hat (Fig. 113) which I was able to acquire at Caruruti shows well the process of fabrication. The basket-maker begins by making the crown of the hat, interlacing 36 tigellas and shortly afterward adding other supplementary stalks whose ends are seen protruding. When the hat is finished, all those projecting beyond the fabric are cut off. The rhythm of the crossing elements is twofold.

285 296 Figure 114. Length, 10 centimeters; width, 8 centimeters. Provenance: Caruruti.

This cigarette case faithfully imitates the ones the Chiriguano have seen in the hands of half-breeds or creoles. Nevertheless, its technique is interesting, for it is purely indigenous. The /Plate LXXXI appears here/ /457/ tigellas of *karandaí* leaves cross in a twofold rhythm.

The Chiriguano are not great smokers and it is rare to find cigarettes among them, so that these cases seem to me to be made for amusement rather than for their practical utility.

Sieves

415 252 There is no Chiriguano housewife who does not have at her disposal at least two sieves. The importance of this kitchen utensil corresponds to the considerable role of corn [262] flour in their food. Of the 12 different dishes that the Chiriguano prepare from this grain, there are six or seven in which it appears in the form of flour. *Kɨwi* itself is made with corn pounded in a mortar and then passed through a sieve. Sieves serve also for cleaning beans and ridding them of the stones and dust accompanying them. Finally, sieves are used for straining *kɨwi* after cooking and for separating the liquid, which is to ferment, from the marc or *temiñu*. They can also be used as simple baskets, and I have seen some holding cotton seeds.

/457 cont./

C 415 285 Sieves are of two kinds. The first category includes those whose meshes are close together and composed of fine strips of barandaí leaves intercrossing in a binary rhythm. Sieves of this type belong in the basketwork called twilled. The Chiriguano give them the name of urumpé and use them in preference to the others, whose usage is limited.

The second category includes sieves with wide meshes. The strips forming them cross in checkerwork, that is, the woof passes alternately under, then over, an element of the warp. The Chiriguano designate sieves of this type by the name of urumpesa, and they use them for sifting ground corn when they wish to obtain a coarse flour.

C G 415 285 191 Some of these sieves are real works of art, but they cannot be compared with the magnificent specimens from Guiana, on which the alternation of the black and white elements produce geometric figures of the handsomest effect. It is probable that formerly the Chiriguano had identical sieves, as can be supposed from the one on Plate LXXXII, which is composed of a warp and a woof whose gray and white elements are arranged in such a way as to form dark and light bands on which concentric squares stand out.

C 415 191 The sieve is widespread in all of tropical América, where it is used not only for corn flour but also for that which the natives make from bitter manioc. It is unknown to the primitive populations of the Chaco, who have not even felt the need to borrow it from the Chiriguano or Chané. The populations of the Inca Empire /458/ did not know its use. The urumpé is a utensil common to nearly all the Tupi-Guarani tribes; it has been described or noted among the Tupinamba, the Guarani, the Kaingúa /Caingua/, the Guarayú, the Pauserna, the Apiaká /Apiaca/, and the Parintintin. The Chiriguano must therefore have taken C [174] along with them when they emigrated from Paraguay, which does not exclude the fact that they may also have found it in use among the Chané.

[illegible] x--317 E-5 (1929) 1930 SF10 Chiriguano SF10

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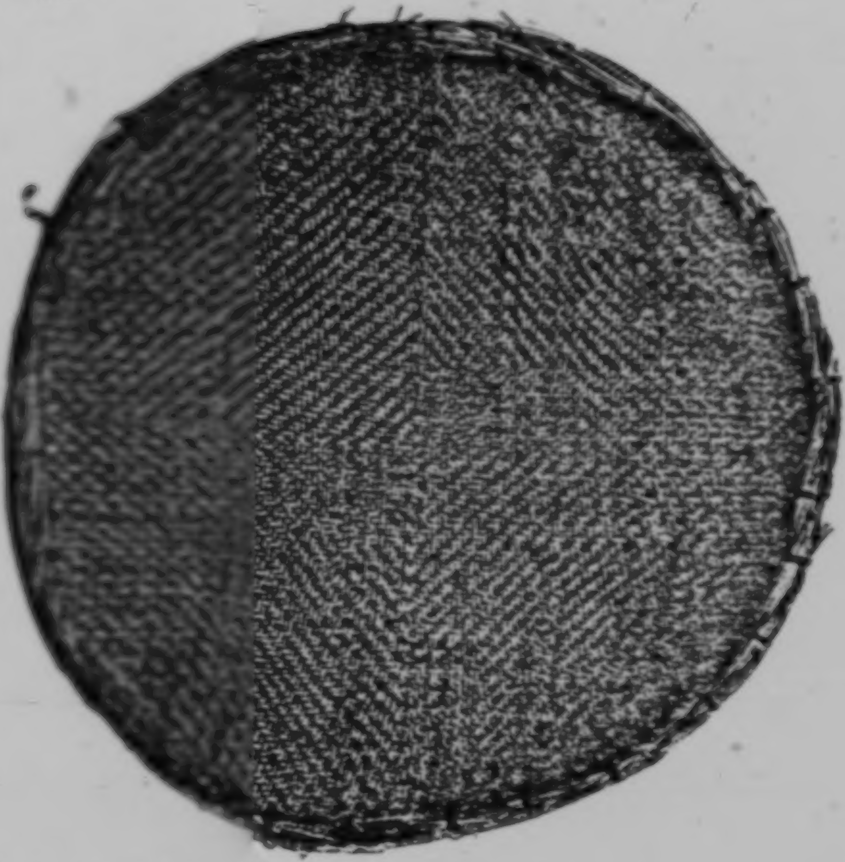
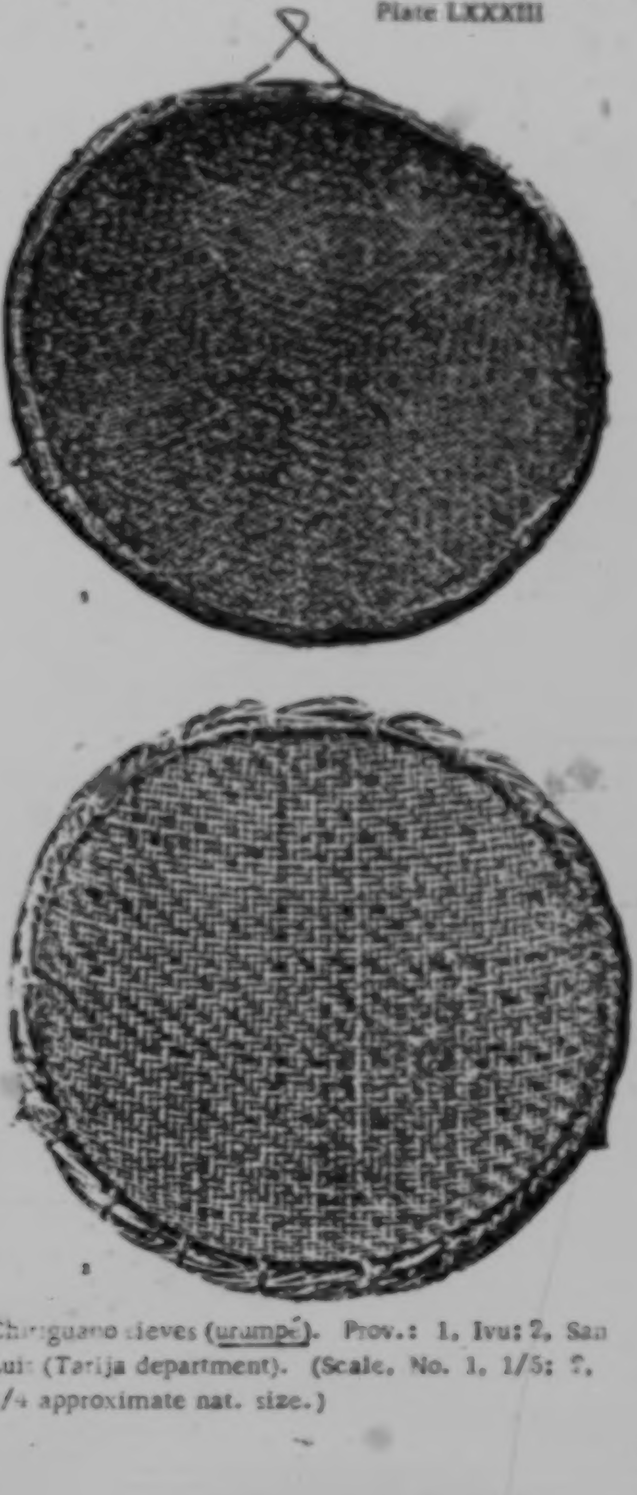
Plate LXXXII



Sieve ([illegible]). Prov.: Igũembé Valley. (1/3.5 nat. size.)



Chiriguano sieves (urumpé). Prov.: 1, Ivu: 2, San Luis (Tarija department). (Scale, No. 1, 1/5: 2, 1/4 approximate nat. size.)

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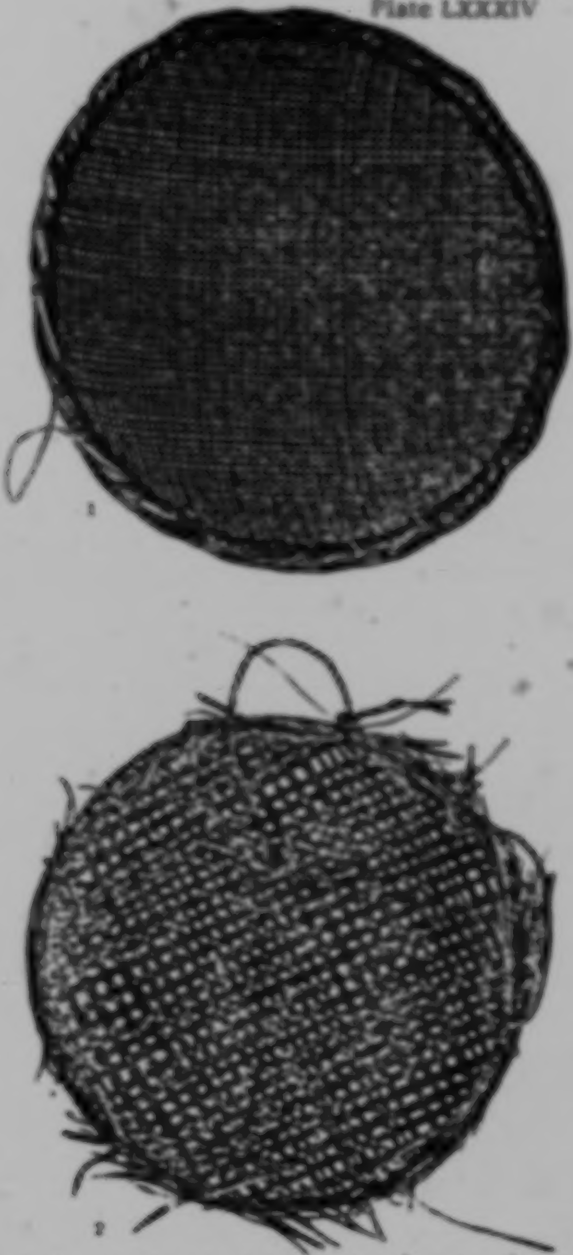
Plate LXXXIV



Large-mesh siever. Prov.: 1 and 2. Saladito (upper Pilcomayo). (About 1/5 nat. size.)

/470 cont./

352 [286] [199] and Arawak tradition. Some hammocks, not many, are crudely woven. The threads which /Fig. 126 appears here/ compose them are of wool; formerly they were doubtless of cotton (Plate XXXVIII).

352 854 851 754 It is a delicate business to persuade a Chiriguano mother to sell you the hammock of her nursling. She fears that an /Plate LXXXVIII appears here/ /471/ evil-intentioned person will profit by the fact that the fabric is impregnated with urine, in order to indulge in magical practices which would make the new-born child die.

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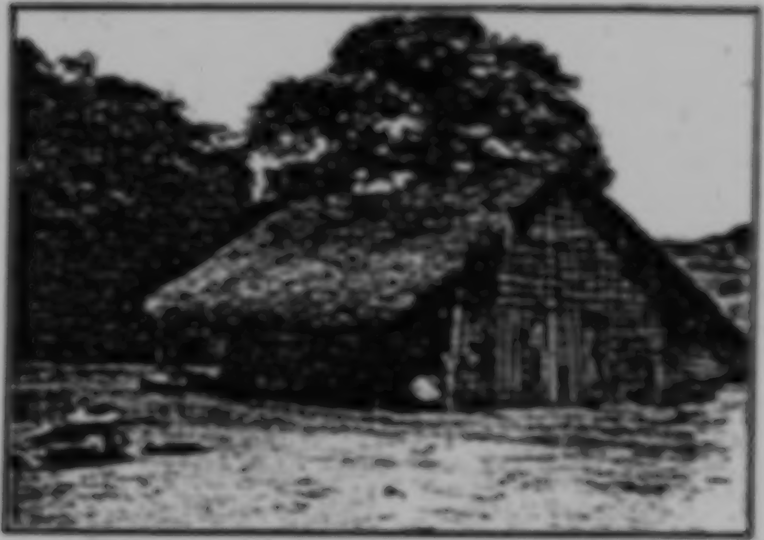

Fig. 124. Chiriguano hut. Saladito (upper Pilcomayo). (Photo. A.M.)

353 [415] Along the walls are lined up vessels of all dimensions which /Figs. 127 and 128 appear here/ are kept there for the drinking feasts; some contain seed, others serve as linen cupboards or provision bags. On the walls, generally in the four [352] corners, hang reed screens or hoops made of palm leaves /Fig. 129 appears here/ which take the place of shelves (Figs. 128 and 129).

[Text continues on p. 342]

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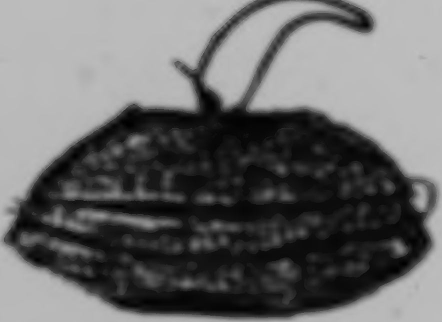

Fig. 130. Armadillo shell (tatu-pire) in which Chiriguano women keep objects for needlework, small pieces of cloth, etc. Prov.: Saladito. (About 1/3 nat. size.)

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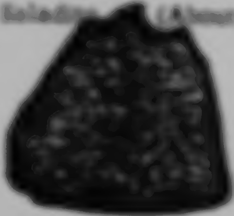

Fig. 131. Bull's testicle (tora-apúa) which the Chiriguano hang up in their huts as a small container. Prov.: Saladito. (About 1/7 nat. size.)

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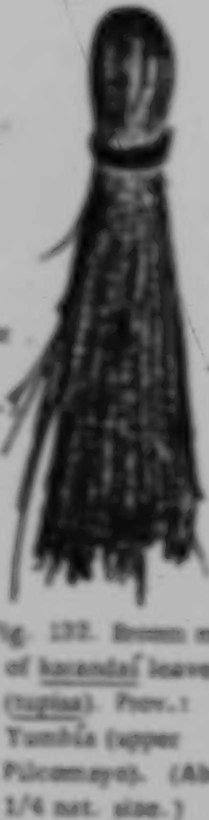

Fig. 132. Broom made of karandaí leaves (tupisa). Prov.: Yumbía (upper Pilcomayo). (About 1/4 nat. size.)

[illegible] cont./

756 757 Judging from this text, the Chiriguano sorcerer, like his Tupinamba or Siberian colleague, put himself into a state of trance so that his spirit, free from corporeal bonds, could go to engage in battle with the soul of the evil-intentioned individual who is implacable against his patient.

778 The rupia, that is, the magical force, is indispensable to one who claims to be a good sorcerer. At least this is the meaning I give to this word translated in the Diccionario Chiriguano-Español y Español-Chiriguano etc. (p. 73) by: "remedy, antidote," but of which it is said that possession is indispensable to every medicine man. This word suffixed to any noun whatever expresses the faculty, the power, the facility to make or obtain the thing signified by the noun. Thus a dog trained to hunt deer is wasu-rupia (wasu: deer), a warrior is tuwaño-rupia (tuwaño: enemy), etc. [913]

239 415 757 Fig. 137. Calabash containing snake fat. Prov.: Saladillo. (About 1/2 nat. size.)

759 [239] Remedies. 1. Snake fat (mboikira) is efficacious against leprosy. The Indians keep it in a small calabash sealed with wax (Fig. 137).

2. A little cotton impregnated with castor oil (yandí) and rubbed on the skin is an excellent liniment for rheumatism.

[237] 302 [237] [820] [415] [241] 3. A similar virtue is attributed to chicken fat (Fig. 138). In everyday life they resort to chicken fat or castor oil to anoint the body, which they then rub with roucou paste. Women generally have their

Fig. 138. Section of bamboo containing chicken fat. Prov.: Caipipendí. (1/2 nat. size.)

/*482 cont.*/

302 faces and legs oiled in this way, which gives them a very strange reddish and shiny hue. This custom, which was already noted /*483*/ in the sixteenth century among the Tupinamba of the Brazilian coast, is tending to fall into disuse. [191] [198]

Roucou in paste form is kept in a small corn-husk bag (Fig. 139), /Fig. 139 appears here/ as is *kalasapa*, a substance composed of a mixture of roucou and pounded *aroma* seeds, which gives a violet color. 302 386 ●[415]

4. Jaguar fat (*yaguapira*) cures any "leprosy" (*karaĩi*) if one rubs oneself with it after heating it. 757 237

5. Iguana fat makes cramps go away and heals wounds. Its use is external. [752]

6. The dried penis of a fox makes toothaches and earaches go away. For that it suffices to touch the ailing part with the end /Fig. 140 appears here/ of this member. The Indians consider it very malodorous and touch it only with repugnance. To avoid this inconvenience they provide it with a handle and shut it up in a bamboo case (Fig. 141). [415]

7. Deerhorns heated and /Fig. 141 appears here/ applied against the neck will cure a stiff neck. The medical use of deer (*wasu*) horns explains the frequent presence of the horns of this animal in the archeological strata of the neighboring Andean regions. Some have thus been found in the ruins of the Alfarcito, in the Quebrada de Humahuaca (Debenedetti, *4*, p. 21), at Tilcara (Debenedetti, *2*, p. 232), at La Paya (Ambrosetti, *6*, Fig. 235, p. 453), and at Tastil (Boman, *2*, Vol. I, Plate XXIX, Fig. 78 *f*). [172]

Horns adhering to a fragment of the skull and whose use could only have been magical or medical must be distinguished from the ones which the Indians work into awls. These instruments still have a ritual use and are reserved for piercing the lower lip of children when they are old enough to wear the labret. At least this is what Campana (p. 80) informs us. Besides, the Indians all have confirmed this detail to me. Formerly, the Tupinamba of Brazil practiced this operation with an awl of the same nature (see Métraux, *3*, p. 105). 858 304 237 412 [171]

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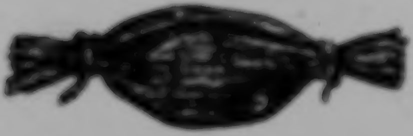

Fig. 139. Small bag made of corn husks, containing roucou paste. Prov.: Salado grande (upper Pilcomayo). (About 1/2 nat. size.)

Fig. 140. Calabash containing roucou seeds. Prov.: Caipipendí. (About 1/5 nat. size.)

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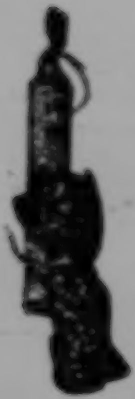

Fig. 141. Case containing a fox penis (aguara-kankuy). Prov.: Ibopeytí. (About 1/3 nat. size.)

252 *Chiriguano* mortars are of the cylindrical type; the pestle is long and
● 415 heavy. Maize flour is sifted in round basket sieves very similar to those
412 used in the rest of tropical South America. Meat is boiled or broiled on a
264 spit; the babracot is conspicuously absent. Food is served in clay
bowls and more rarely in wooden dishes, and eaten with wooden spoons.
[317] Salt is extracted from mines near San Luis, or obtained by evaporating
[263] the water of salty brooks.

VILLAGES AND HOUSES

342 **Dwellings.**—Until the 17th century, the *Chiriguano* built large com-
178 munal houses, "150 feet [46 m.] long," in which many families lived
592 together, each occupying the space between two wall posts (Lizárraga, 1909, p. 552). A hundred years later they were lodged, as they are now, in small rectangular houses, with a steep gable roof and wattle-and-daub walls. Sometimes the roof projects in front to form a small veranda. A house belongs either to a single biological family or to two or three closely related families, generally parents with their married children.

361 The ancient villages were composed of three to five long houses, grouped
178 around the plaza. Modern villages also have a central plaza. A store-
[343] house is built on piles near each dwelling and serves to protect crops
[712] against rats and dampness. Like the settlements of their Paraguayan ancestors, some ancient *Chiriguano* villages were protected by a single or double palisade.

352 **Household furniture.**—The *Chiriguano* sleep on platform beds of reeds and use their woolen or cotton hammocks to recline on during the day or as cradles for babies. The typical *Chiriguano* hammock is made of long warp threads twined together at set intervals by weft strands; a few caraguatá specimens are made in a net technique. Other items of furniture are benches carved of a single piece of wood, large vessels to store clothes and food, and crude shelves hanging from the roof. A tree trunk with three radiating branches serves as supports for vessels or for piles of corn.

DRESS AND ADORNMENT

291 **Clothing.**—*Chiriguano* men, wearing only a G string (chiripá), were a
177 common sight before shirts and pants came into general use. The cotton tunic (cushma), which was adopted from the *Quechua* after the *Chiriguano* migrations, disappeared long ago, but the poncho, a more recent acquisition, is still popular. As early as the 18th century, *Chiriguano* horsemen, in true Spanish style, wore skin breeches and leather coats. They wear sandals when they have to walk over stony ground or through thorny bush.

2:Métraux E-5 (1929) 1948 SF10 Chiriguano SF10
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The de luxe vases and dishes, typologically related to vessels in the archeological pottery of southern Bolivia and northern Argentina, were decorated with distinctly Andean patterns (figs. 58, 60). The most common vessel is the yambui, a subglobular vase with ears, in which chicha was served. The motifs are mainly geometrical and most of them

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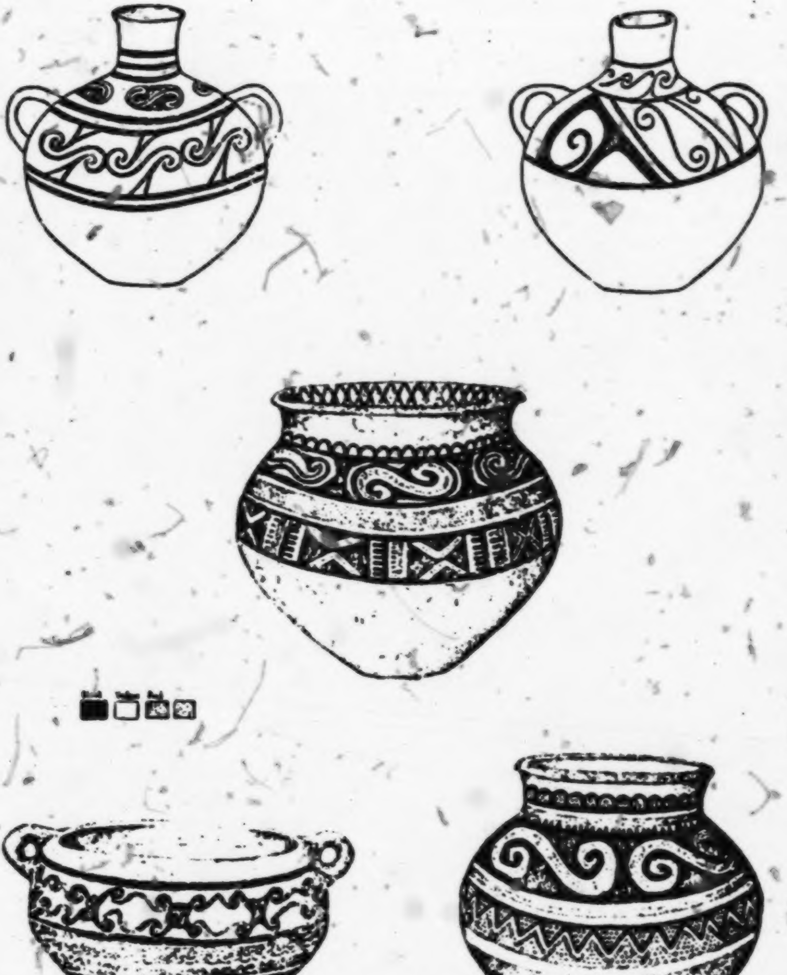

FIGURE 60.—*Chiriguano* pottery. Specimen at *top, right,* a *Humahuaca* archeological specimen included for comparison. (Approximately 1/7 actual size.) (Redrawn from Métraux, 1930 b, fig. 70, pls. 35, 37, 44.)

2:Métraux E-5 (1929) 1948 SF10 Chiriguano SF10

Chane SF8

are based on a triangle surmounted by a scroll, which is multiplied in C 323
countless variations. [531]

Women potters (pl. 41, *top, left,* and *bottom, left*) tempered the clay C [462]
with crushed potsherds and built up their vases by coiling. They painted
them with several kinds of ocher and with black obtained from rosin. [386]

Spinning and weaving.—Among the *Chiriguano,* wool is more com- C Cc
monly used than cotton for textiles, but *Chané* fabrics are generally of 286
cotton. The fibers are spun with a drop spindle weighted with a clay 283
whorl (pl. 42, *center*). Although garments are in part Andean in shape, 171
the loom remains of the vertical type. Formerly, indigo was the favorite 386
native dye; today aniline dyes have entirely replaced it. The ornamenta- [531]
tion of the fabrics is limited to a few stripes.

Netting.—Fishing nets and carrying nets are made by means of a C
wooden gage in a reef-knot technique. 285

Basketry.—Fans, round baskets with overlapping lids, and sieves are twilled with palm leaves in the best Guiana fashion, but wickerwork basketry is very common. No large baskets for carrying or storing food are made.

Gourds.—The painted, incised, or fire-engraved (fig. 61) gourds C 415 ●
(*Lagenaria siceraria*) used as cups are, after pottery, the best expres- 531
sions of *Chiriguano* art. The motifs are mainly geometrical, with occasional realistic representations.

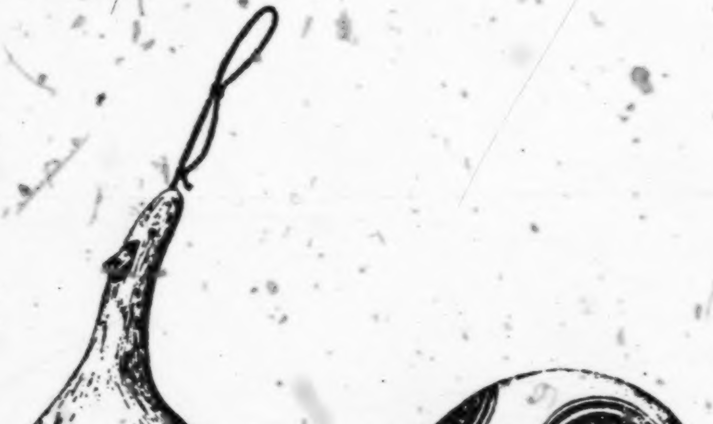

FIGURE 61.—*Chané* calabashes. *Left:* Specimen with lid (approximately ¼ actual size). *Right:* Pyrograved specimen (approximately ⅓ actual size). (Redrawn from Nordenskiöld, 1920, fig. 50 and Métraux, 1930 b, pl. 62.)

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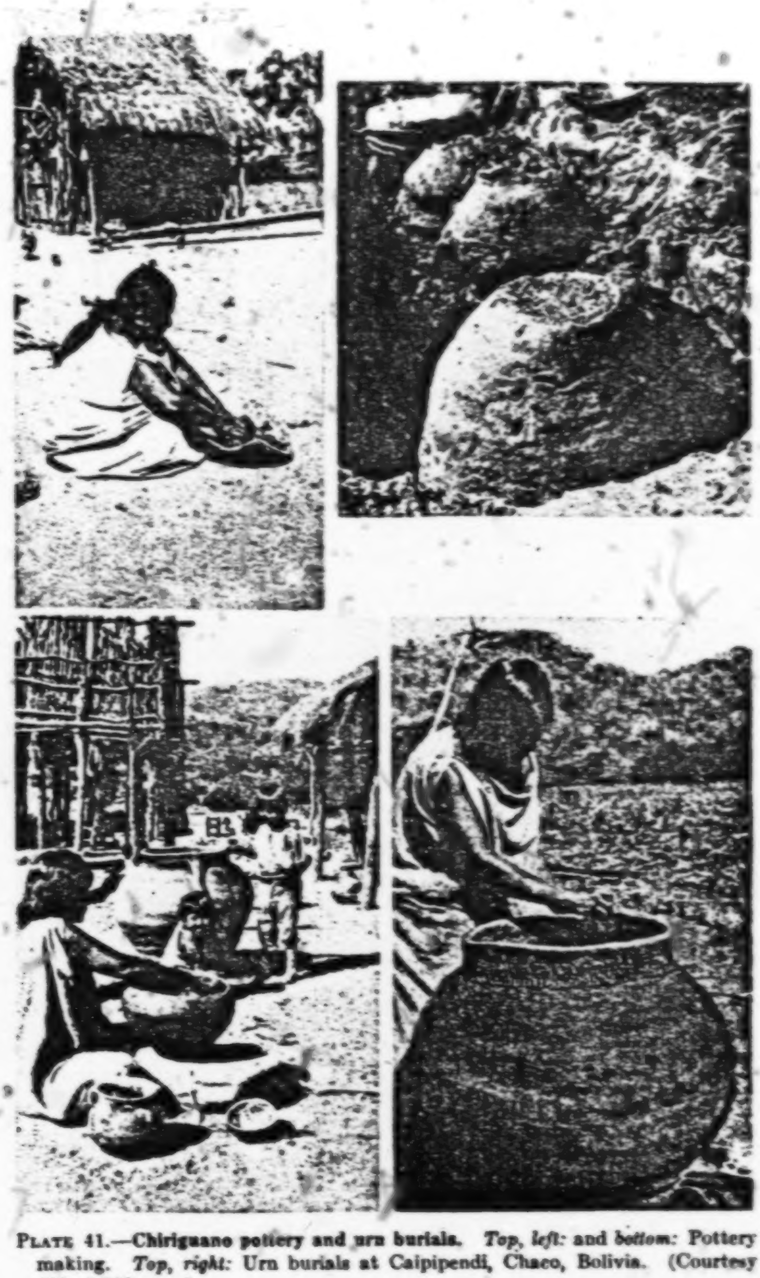

Plate 41.—Chiriguano pottery and urn burials. *Top, left:* and *bottom:* Pottery making. *Top, right:* Urn burials at Caipipendi, Chaco, Bolivia. (Courtesy Alfred Métraux.)

[End Plate I]

245 /17 cont./
137 and feet with them, as will be seen; for this last purpose it is
824 prepared beforehand, many pods being boiled in an olla, and
[302] pastes of every size are made from the decoction, depending
[303] on the value that they wish them to have; it is traded by
[439] Chiriguanos and whites.

137 The Bixa orellana, or "Urucu," as the Indians call it, is
824 a plant of high value for the Chiriguano; he will travel far to obtain a small amount in the towns or places where it is prepared.

ALGARROBO. -- The place where this extraordinarily large tree abounds is in the pampas; thus in the plain of "Curuyuqui" of Yvu Mission, Isoso, Parapiti, and the Gran Chaco it is found forming forests. It is very bulky and has
[342] long branches which on some touch the ground; its trunk is
[415] thick and not always erect, the wood is excellent, similar to oak in spite of being dark, and it is much used for making tuns, door and window casings, and even for barrels. In
[262] Chiriguano this tree is called /18/ "Ivopei," and the "Ivope"
[273] pod is long, compressed, and yellow; when it is ripe, it is sweet and much sought after by livestock and by the Chiriguano; it is their food and drink in times of scarcity as well as other times, and the mead that they make is extremely intoxicating. On the bank of the Pilcomayo even the whites eat this pod; the Toba, Choroti, Mataco, and others hold their orgies when the algarrobo ripens.

ALGARROBO CHICO. -- This is a smaller tree than the previous one, even its fruit is smaller, speckled in color, and sweeter than the true algarrobo, but not as abundant as the
[262] first. As the pods are small and the seeds within abundant, it is not highly thought of among the Chiriguano; they only eat it out of necessity or as a tidbit; the wood is not valued very highly because undoubtedly there are others that are better. In Chiriguano it is called "Ivope rai."

ALGARROBO AGRIO. -- This is also small, and it is called
[262] "sour" because the flavor of the pods really is sour. In times of scarcity it is also food for the Chiriguano; the pods are small, and the tree has its congenial sites. The Chiriguano Indians call it "Ivopetayi."

/19 cont./
137 in dry places; when dampness penetrates it, it is destroyed in a
824 few years, as experience has shown. The bark that is found
[757] under the first layer is split, washed in tepid water, and left
to steep overnight; it cures intermittent fever. The Argentinians
call it cacha, the whites quebracho, and the Chiriguano "Igũiraro."

AZUFAIFO /jujube tree/. -- This is abundant hereabouts
[262] and is a tree of medium size. Its wood is not valued very
highly, but the fruit, the size of a grape seed and of a dark
coffee color, is a great resource in times of scarcity for the
poor Chiriguano. It ripens in January and February and is liked
even by cattle and by sheep and pigs. The whites call it
mistol and the Chiriguano "Yuá."

245 BANANA TREE. -- Cultivated in orchards and well fenced-in fields, it forms a grove, and each plant yields or produces
a cluster, very large on some of them. When the ripe cluster
is removed, the plant that produced it must be cut in order
that the others may produce their own. There are several
[262] varieties, large and small, the latter very sweet and eaten
as fruit, and the former only when boiled and roasted; the
whites call them plátano, and the Chiriguano "Pacoba."

137 BIGONIA ACUOSA. -- This is a tiny little bush one vara
824 in height, which under the ground has a large root like a
[271] watermelon and even larger; it contains much pulp which,
when squeezed, yields potable water and is used for it in times
of scarcity. The Chiriguano call it "Sipoi."

[342] CATALPA. -- This is a large tree and fairly strong. Its
wood is used in the construction of houses. The color of the
/20/ wood is dark, but when it is newly cut it is somewhat
[515] green. Its flowers are purple, and the Chiriguano chew them
to whiten their teeth; they are bitter and because of this
the tree is called "Tayi," or bitter, in Chiriguano, the whites
call it lapacho.

CEIBA. -- A large tree with deformed trunk, and furnished
with sharp points, broad leaves, and large, white flowers which
produce a material similar to cotton without fibers, for which
reason it is smoother and shinier; it is used for mattresses
[322] and pillows and candle wicks. The wood is spongy and not at
● [415] all hard; from it are made troughs to hold water from year
to year and in this way they are not soon damaged. Its ashes

137 /20 cont./ ITS ashes
824 are good for the manufacture of soap, the bark is an emetic.
[388] The whites call it toborochi and the Chiriguano "Samuú."
There are several varieties and all of them are utilized to
[757] some degree or other.

CEIBO. -- This tree is smaller than the former, but its
[322] wood is much superior, very fibrous, and rather light in weight,
● [415] being used to make troughs which are very durable since they
neither split nor are eaten by wood borers. It is very pretty when
[262] it blooms; the flowers are fiery red and good for salads. The
Chiriguano call it "Suinandi."

DRAGO /dragon tree/. -- A tall tree, straight and quite
thick; the wood is strong and useful. If an incision is made
[757] in the tree, a very red resin comes out; its bark is the best
for making the teeth hard and for curing scurvy. The gum
called "dragon's blood" is extracted from this tree. The
whites call it tipa and the Chiriguano "Güirapitiyu guasu."

ENEA /cattail/. -- An aquatic plant which abounds in certain ponds and pools formed by the water of rivers which flow away from the main stream; the Indians use it for roofing their houses, muleteers for packsaddles, and others for mats in the dwellings, on which they also have their bedding for sleeping. This is the totora or matara of the whites and the "Caipempe" of the Chiriguano.

[262] ESTORAQUE /storax/. -- This is a very large tree of the forest; it has whitish flowers and yellow fruit the size of a fig, which is edible and a favorite of parrots and monkeys; the Chiriguano eat it as a fruit and call it "Aguai."

GARGATEA or CARICA MAMAYA. -- This tree is not very
abundant nor is it found in every section. It is of normal size,
with a straight trunk and smooth bark softer than the fig tree;
the wood is soft and is of no use at all, being similar to that
[262] of the ceiba, or toborochi. Its leaves are like those of the fig
tree, and the fruit is of the /21/ same size and form, but
[252] yellow; it is edible and good when boiled or roasted, if eaten
raw, it hurts the mouth. In Chiriguano it is called "Caincantina."

/178 cont./

353 [356] Chiriguano towns attract the attention of all travelers and explorers because of the cleanliness which reigns in their houses, which, despite having a notable quantity of furnishings, are well kept up through the assiduous work of the mistress of the house. [415] [352] Jars with wide mouths are in the corners; those with narrow mouths, in which the chicha must ferment, lean vertically against the walls; the plates and spoons are on small triangular tables of hollow cane in the corners; small ollas are placed inside the empty large pots, and these in times of abundance, and even in times of scarcity, are full, some with shelled maize, others with beans and gourd seeds, and others with wool and cotton for making ponchos, blankets, or outer garments.

[824] [251] /179/ Above, at an appropriate height, they hang a mat of hollow cane or little sticks well tied together well with Ivi, or ceiba, and there they put other trifles or small things, when they do not have anything else to put there, such as cheeses and charqui, or dried meat. The mat is usually hung on one side of the house on one of the rafters by means of thongs of cowhide or other material. They are placed there so as not to be in the way of those who must pass beneath (1).

[824] 1. The Ivi is a species of ceiba, samuu, but it does not have points like the latter. There is another called Cuari or Tayipiruru, which is very straight, has very strong fibers, and is only cut at the branches in order to pull off the bark. A fourth type of ceiba is called Iviru guasu; it is large and smooth. Each type has its congenial place, like every tree.

Finally, in the corners of the house or where it is most convenient, up high, they put one or more cords, which form an angle from one wall to the other, and there each member of the family puts his own clothing and the men hang the harness of their beasts of burden. Today the Chiriguano who are not lazy are not so poor, and when one enters a house one is amazed by all the abundance of furnishings so well arranged.

/181 cont./

524 gallery two cords, tying at the ends a piece of cowhide 80 centimeters long by 30 in width, hanging about 60 centimeters above the ground. This is called Sabiuca, swing, and here the little boys and girls swing and rock.

562 Women sit on the ground in their houses and observe the
524 same custom when they go visiting. The man waits until he
576 is told where he should sit and always receives the best seat.
516 The woman does not wait; she knows her place; she arrives, does not greet anyone, leaves her bundle in a corner, if she has one, and then squats down in such a way that from near or far many women squatting like this look like so many carronades /camaretas/ ready to go off.

Matés

462 In the furnishings of Chiriguano houses a preferred place
241 is occupied by the matés, made of gourds divided vertically
415 through the middle. This is man's work; he plants them and
322 cultivates them in his field, and when they are mature they are brought to the house where they are allowed to dry in the shade and also in the sun. Some three months are needed for this or even more, depending on the season. Nevertheless, they are watched throughout to see whether a fingernail will penetrate the skin. When the fingernail will not penetrate, the gourds are ripe. Then they remove the first skin, split them, extract and compl[illegible] remove the pulp, keep the seeds for the new planting, and, when they are clean, they let them dry for a few days.

462 They are put in a separate place, and a second operation
415 begins. With his Chiriguano patience, with a knife or other
531 instrument, the Indian begins to engrave whatever figures occur to him, such as tree branches, circles with grains of sand, squares, figures of jaguars, doves, lizards, dogs, chickens,

/181 cont./
462 bulls, deer, etc. If all this carving were woman's work, it
415 would have but one name, Sacuarama, but since it is man's
531 work, each figure has the name of the quadruped, biped, or
reptile that it represents (2).

[825] 2. Thus they say Machuru haangaño, figure of
a lizard, Yaimba haangaño, figure of a dog.
Even the men call the figure of a jaguar or a
dove: Sacuarama.

/182/ With this second task the work can be considered
finished. Days or weeks are employed depending on the greater
or lesser quantities of the mates. They now color all the
[386] etched figures with ground charcoal and paint the empty spaces
[239] with Urucú, achiote, making them firm with the Taragüirisi,
which is abundant everywhere, then singeing them in the flame
of the fire so that the pictures will never lose their shine and
luster or the painting of carbon and urucú come off (1).

237 1. The Taragüirisi is a species of ant which is
323 common in cold weather. Its length is not
825 over half a centimeter and its thickness three.
It moves about the small branches of certain
small trees, where it leaves its speckled whitish
excrement. All potters provide themselves with
an abundance of this material.

Pottery

323 I shall now go on to consider women's work, limiting
[462] myself to the most important, such as clay vessels and textiles.
[317] For the former the Chiriguano woman provides herself before-
[484] hand with the best clay, which she knows very well and even
brings from long distances, if it is not found in the territory
of the tribe. Naturally the potter not only wishes to avoid the
loss of her labor, but also, insofar as she can, she wishes to

/183 cont./

323 form of a sausage or thick meatball eight or ten centimeters in diameter, and with this first effort begins the piece in the cleanest and flattest space (1).

> 1. The lump for the piece is kneaded on a sheepskin or goatskin, on top of a potsherd, or on a piece of wood.

415
323 If a piece is of small dimensions, she finishes it rapidly. Plates, for example, are made very fast, and they can make up to ten in one day; the vessel for keeping water can be made in half a day, but the ones they call Yambui, a large vessel with a narrow mouth, and Ňae, one with a wide mouth, or cántaro, as they say around here, neither can nor should be finished in one day, both because they are large and because it is necessary to work with care and skill (2).

323

> 2. The base of every piece is made out of a portion of clay which they flatten out like a tortilla, on which they make a small rim turned upward, and to this they keep joining the clay in the manner described. The burnishing, which they do with a maize cob, seems very insignificant, but is more than necessary. Without this operation the cántaro would not hold water, much less would it hold chicha.

One who hurried in the manufacture of large pots would never finish them, because the soft clay would always fall down; for this reason the procedure is a slow one. When the base and somewhat more has been made, they suspend the work for a while, so that it may dry through the action of the wind or breezes; in the meantime she continues to polish it, first with a maize cob, Atiígũe, and later with a special shell, Inta, and finally with a special stone about three centimeters in

4: Nino--259 M-3 (1893-1911) 1912 SF10 Chiriguano SF10

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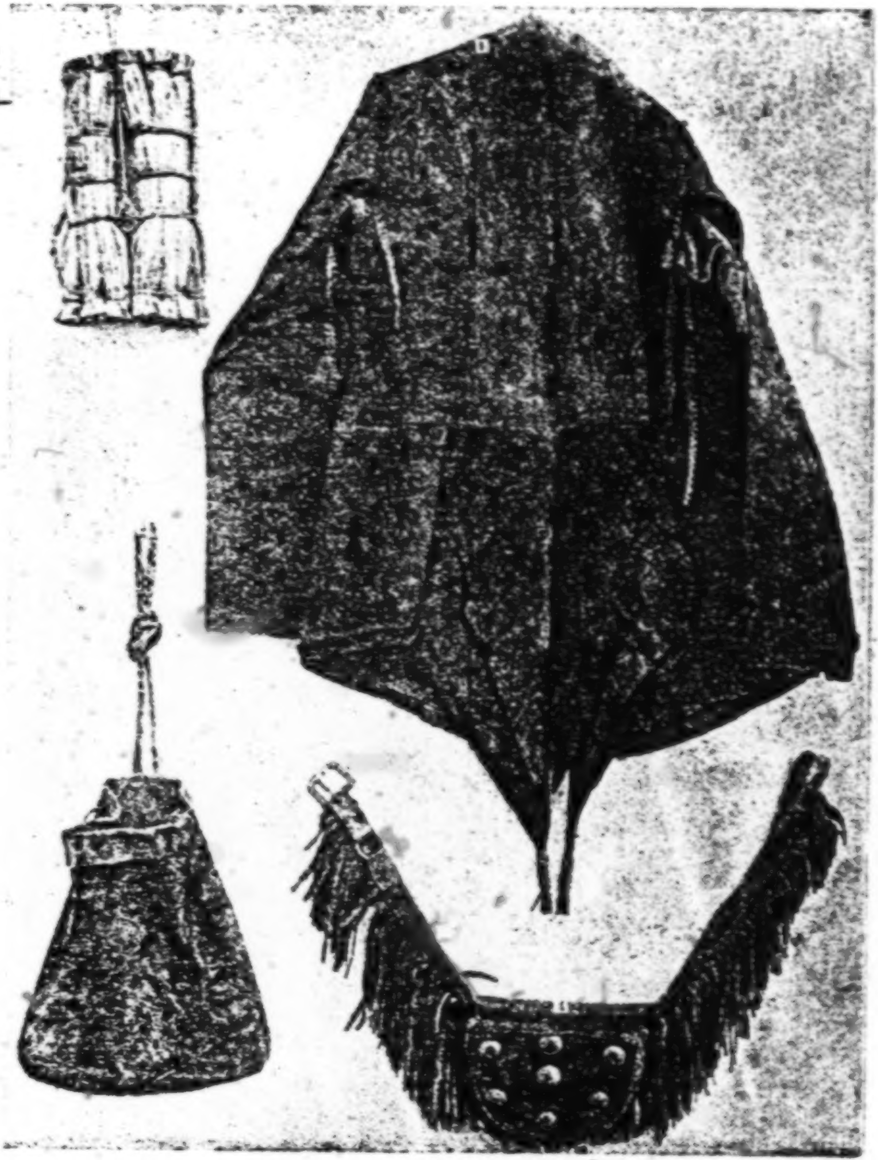

Chiriguano saddle or seat, sagum, bag, belt

/191 cont./

292 [562] make people laugh at the carnival. The same thing can be said of other antiquities. I have placed in this chapter the method for making it, as well as the one for the hat, because it is work from which only the man benefits and both are counted among his garments.

Conveniences

463 In the course of the previous pages it has been seen that the Chiriguano is hunter, warrior, and also sorcerer. The first and second categories contain many, and the third one fewer, and this is easily understood, because a knowledge of medicinal herbs is needed and, more than this, the art of knowing how to deceive with prattling, which is not for all.

463 291 ●415 The three classes wear a belt with a bag which hangs from it. The belt is called "Bosa," doubtless because it has a bolsa /bag/. In this those of the first and second category put tobacco, maize husks, and flint, tinder, and steel for making fire, and sorcerers add to these things the implements of their profession, which /192/ are the Mbaecagũe, a piece of bone, the Itarapúa, a round stone, both of which are necessary for the cures... miraculous ones (1).

[177] 1. The Bosa does not seem to be of Chiriguano origin. Anduari doubts that it was introduced by the Argentinians or by the Tarijeños /people of Tarija/, but it seems to me that it was the former who introduced it, because it is similar to the one used by the gaucho.

/192 cont./

291 [286] Others who are not hunters, and hunters themselves when they are not engaged in this activity, fasten the breeches at the waist with a belt that they call Cuacuá; their wives weave it; it is made of wool and painted in various colors. They all have one, except some of the old men.

● 415 [281] [482] Another of their conveniences is the Urupucu, long bag in its literal translation. The Urupucu seems to be the Chiriguano's own; it is of tanned wild boar or pygmy deer hide, narrow at its opening, which they close with a little cord, gathering the opening; they sew around, and through the seam they pass the cord, which is rather long so that it can hang from one shoulder and be passed to the opposite armpit like a horseman's escarsela. This bag is used as a container for carrying provisions on a trip. In it they put boiled meal, parched corn and charqui. This is done by warriors, hunters, and travelers, and, well secured, as has been explained, it is never lost.

415 494 312 Finally, there is no lack of another convenience for carrying water. In order not to experience the effects of burning thirst, he has a type of gourd with a hard shell like that of the matés; he empties it, removing the pulp and seeds, making a hole in the middle, puts it in a kind of net of cords, leaving one or two larger meshes near the hole placed at the top, where the Chiriguano himself makes a small circle, fills it with water, stops it up with a maize cob, and during a trip uses it sparingly, if he has foresight, or else he may not have it when he needs it more (2).

2. The Indians who are governed by corregidors in the region of the Gran Chaco traveled with their respective tarí or tutuma on their expeditions to the desert of Paraguay.

/209 cont./

843 Near the time of giving birth, she carries less weight,
222 prepares what is necessary, which consists of some cloth pads
● 415 and her new little olla in which to cook the maize which she
[153] must eat boiled. If the olla were old or used, the newborn
would be subject to mal caduco, or epilepsy, and if a woman who has just given birth were to eat parched maize, her breasts would dry up and would not give milk for feeding the child.

844 At the time of giving birth the only person left in the house is the midwife; the others, even the husband, go out, but he returns as soon as the birth has taken place, in order to lend some help to his wife and the midwife, who alone cannot attend to the newborn child and its mother, who fights with her very life against the pains, for which she is consoled at the sight of the fruit of her womb, which for a moment makes her forget her present suffering.

They at once cover with sand every trace of the event, wrap up with bands, cloths, or other things the body of the woman who has just given birth, and lay her on the ground face down, making her rest on a bed which has little or no resemblance to such, but as every Chiriguano woman is strong, she puts up with this as though she were in a featherbed.

184 Throughout the whole world birth is a very dangerous thing,
846 and it is even here. The Chiriguano women also need considerable rest. When some old women were asked about the matter, they stated that childbirth formerly lasted almost two weeks, and they marvel that the neophytes get up so quickly, returning to their customary labors within eight days; they attribute this robustness to the lack of strict fasting in the years of puberty.

846 /210/ It is consequently an error to state that puerperae
go to the lake or river to bathe from the second or third day,
much less on the same day as the birth. Natural reason would
not allow the latter. There might have been some extraordinary
case in which some woman walked immediately after giving
[178] birth, but it would not cease to be an extraordinary case. The
neophytes are abandoning the custom of their grandmothers and

/243 cont./

> 244 one preferred by the Chiriguano, and he has good reason, as it is quite edible, the least damaging to health, in addition to being the seed which is most resistant to drought. It is very abundant, and as many as four harvests can be taken from it.

262 The Chiriguano plants whatever type of beans /judías/
252 he has or can obtain from his neighbors or companions when
[244] he runs short, because only in the case of maize, which he prefers to eat parched and not boiled, does he plant several varieties. All beans /alubia/ are good to the Indian because of the use that he makes of them, which is to boil them and eat them, to roast them under hot ashes with their pods, or, by making a hole in the ground, to heat it and burying the pods there so that they will cook.

244 If the Chiriguano frequently lacks beans to mix with the maize, it is unlikely that he will be without gourds, which grow with little cultivation and which are so resistant to drought; it is also extremely easy for him to plant this food, so much so that women and children devote themselves to it, because not many plants are needed in a plot for an abundant harvest.

244 Twelve classes of gourds are known, but only five are
262 edible; the other seven are used for matés. The edible ones
[415] are the following; Andai, Gũindaca guasu, Gũindaca mi, Gũindaca mi guasu, yiquisigua; the latter has an edible interior and the exterior is useful for domestic purposes, to keep
249 any object in its hard shell. The gourds that serve for matés are Iá, true maté; Iá pua, round maté; Iámpe, flattened maté; /244/ Iá guasu, large maté; Iá-rai, small maté, Iá pucú, long maté, and Iá pani, twisted maté (1).

> 1. The Indian does not include in the number of gourds the one the two children used to free themselves from the deluge of water because it was a miraculous one.

C ce 352 received from their kinsfolk at Mojos, or they may even have brought it with them when they migrated to their *[171] present abode. Nowadays the Chiriguano and Chané commonly use chairs of the type they have learned from the C ce [177] whites. They are made by themselves in the missions.

C ce [237] I have a rush mat from the Chané. Both the Chiriguano and the Chané have skin mats. I have already spoken of such mats in Part I of this work. The skin mat is naturally a southern culture-element.

C, ce 353 The Chiriguano and Chané keep their belongings either hung from the ceiling or else on the floor. C ce *[171] ●[415] Clothes and other fragile things are often kept in large earthen vessels — a method of keeping one's belongings which I have not seen anywhere else. Cobo[1]) says that the Incas kept their clothes in a similar way.

C ce 353 *171 It is very common among the Chiriguano and Chané to fix wooden hooks in the roof of their huts on which to hang their belongings (fig. 4). Elsewhere I have only seen these hooks among the Churápa. In the Gothenburg Museum there is a collection by Liljewalch and Thulin of hooks made by Indian tribes on the Roraima. The only mention of them that I am aware of in literature on the subject is from the Araucanians.[2]) Small articles of this kind are, of course, easily overlooked, wherefore it is not at present possible to draw a map of their distribution. This is to be regretted, as the distribution of such small objects would offer points of great interest. It seems to me not unlikely that the wooden hook is an Andine culture-element. Within my sphere of work the hook does not occur among other Indians than those mentioned here.

C ce 353 415 Small articles are kept by the Chiriguano and Chané in cloth and leather bags, wooden boxes, baskets, armadillo scales, the scrotum of bulls, and in calabashes with or without lids.

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[1]) Cobo Vol. 4. P. 171.

[2]) Latcham (1) P. 338.

[Text continues on P.22]

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I have not seen wooden boxes anywhere else, and scarcely think they are genuinely Indian. I shall return to the subject of baskets.

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& 171

Except among the Chiriguano and the Chané, I have only seen the scales of the armadillo used as boxes among the Mataco, and there only as a curiosity. They are, however, known from the Guyaqui[1]), from the Indians of Roraima[2]) and from Indians in N. W. Brazil[3]). The sewn baskets of armadillo scales which are sold in the curiosity-shops of Buenos Aires probably hail from Paraguay, and it is not impossible that here, too, we have to do with an original Indian idea.

C
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The fat of various animals which is used for healing is usually kept by the Chiriguano and Chané in shells, especially those of the *Borus oblongus*.

I shall return to the subject of calabashes.

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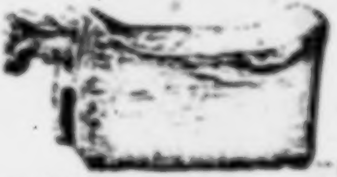

Fig. 3. Seat of wood from the Chiriguano. G. M. 13. 1. 178. 1/8

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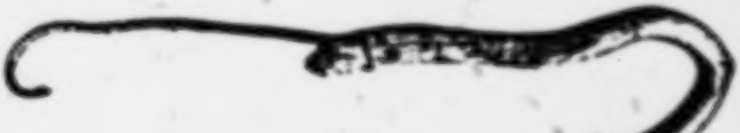

Fig. 4. Wooden hook. Chiriguano. R. M. S. 600. 1/8

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[1]) KUNIKE fig. 15.
[2]) G. M.
[3]) KOCH-GRÜNBERG (2).

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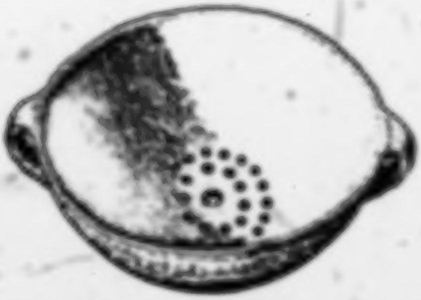

Fig. 16 a. Upper part of the steaming apparatus. The specimen given here is from the Mataco-Vejos, who learnt to use it from the Chané. R. M. M. [illegible].

IX.

Utensils used in preparing and consuming food.

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[412]

The Chiriguano and the Chané have large wooden mortars with long wooden pestles. Hand-mills of stone or any other material are never used. The geographical distribution of the mortar has already been dealt with in the first volume (map 10). Evidently the wooden mortar has come to the Chiriguano and Chané from the east. It is a northern and eastern element of S. American culture. Among the Chiriguano one sometimes sees mortars hollowed out in stumps of trees. It is obvious that the Whites did not introduce the mortar here from the fact that it was mentioned by such early author as Schmidel from the Syeberis in North Chaco.

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[415]

Both the Chiriguano and the Chané sift and strain through a round basket, the urupé (fig. 34). The following table shows us how sifting and straining is done by the tribes I have visited. Some tribes use four-sided sieves and strainers.

Nordenskiöld E-4,(1909-1906. 1913) 1920

SF10 Chiriguano SF10 ●

Chane SF8

Aymara SF5

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[415]

Table 7.

	A net bag	[illegible]	Square sieve	Urupé	[illegible]
Ashluslay	—	—	—	—	—
Atsahuaca	?	?	?	—	—
Aymara	—	—	—	—	+
Cavina	?	?	—	—	—
Chacobo			—	—	—
Chama	?	?	—	—	—
Chané	+	—	—	—	—
Chimane	—	—	+	+	—
Chiriguano	—	—	—	+	—
Choroti	+	—	—	—	—
Guarayú (mission)	—	—	—	+	—
" Pauserna	—	—	—	?	—
Huanyam	—		+	—	—
Huari	—	—	—	+¹)	—
Mataco	+	—	—	—	—
Quichua	—	—	—	—	+
Tambopata-Guarayo	?	?	—	—	—
Tapiete	+	—	—	—	—
Toba	+	—	—	—	—
Yamiaca	?	?	—	—	—
Yuracáre	—	+	—	—	—
Itonama	—	—	—	—	—
Baure	—	—	—	—	—

From the literature I know of the urupé from the Paressi²), the Indians of the upper Rio Xingú³), the In-

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¹) Not obtained.

²) See Nordenskiöld (a) Fig. 31.

³) Max Schmidt (4) P. 209.

⁴) Max Schmidt (3) P. 330.

dians of the Roraima district,1) the Indians of northwestern Brazil,2) the Maquiritare3) and the Uitoto.4)

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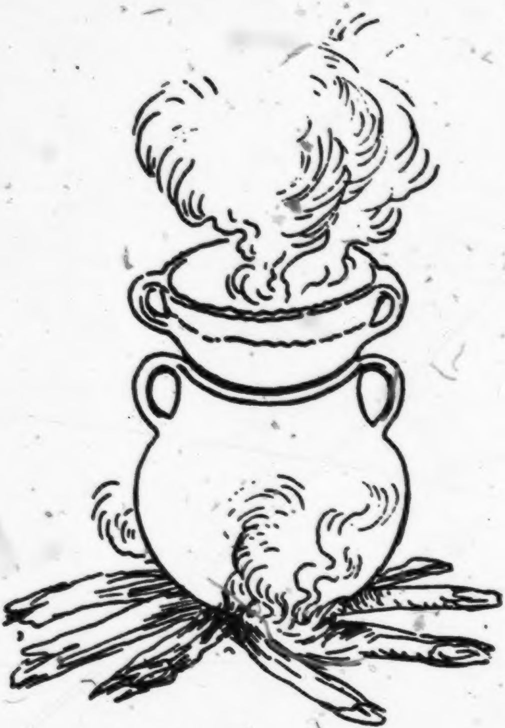

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Fig. 16 b. Steaming apparatus. Chané, Rio Itiyuro.

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The Urupé is obviously a northern cultural element. It is certainly not from the western culture zone. GARCILASSO5) says that the Inca sifted through cloth, or rather

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1) G. M.
2) KOCH-GRÜNBERG (2) Vol. 2, P. 217.
3) R. M.
4) WHIFFEN Pl. XXII.
5) GARCILASSO Libro VIII. Chap. IX.

e Ce 252 ● 415 *171 [412]

that they fanned the flour. They had no proper sieves. As we have seen from the table, the Chaco tribes have no basket-sieves, but use bag-nets instead.

Mandioca-graters do not occur among the Chiriguano and the Chané.

Ee 252 415 273

Of course the Chiriguano and the Chané cook their food in earthern ware. Maize-beer »Chicha», their chief food, is boiled in large vessels. It is only with great difficulty that these can be moved from one place to another[1]). Some of the Chiriguano occasionally allow the maize-beer to ferment in hollow stumps of the bottle-tree.

e Ce 252 415

The steam cooking-pot shown here (fig. 16) is of very great interest. It is used by the Chané and Chiriguano in cooking a certain dish of maize, the »huintimimmo».[2])

I have seen this contrivance being used as shown by the illustration, but I have, unfortunately, not tasted the maize-dish that was cooked in it.

e Ce 252 415 *171

In literature dealing with other parts of S. America I have only found this steam cooking pot mentioned by ULLRICH[3]) from the Rio Grande do Sul (Munizip Pelotas).

He there found pieces of »Siebtöpfen» and says that they were used on the top of a cooking-pot. ULLRICH[3]) tells us that these steam-cooking-pots were used by the

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e Ce [172] [437]

[1]) When fragments of very large and heavy earthenware vessels are found in archæological excavations one may, as a rule, presume that they originate from a permanently settled tribe. It may be assumed with perfect certainty that these very large vessels were made at the spot where they are found. Small earthen pots may, however, have been bartered from some other tribe. This is naturally of a certain interest if we wish to distinguish between native and imported pottery found in archæological excavations. — Some of the Chiriguano at the Rio Parapiti make only the big common clay vessels themselves and get the small, painted pots by barter from other Chiriguano Indians.

[2]) CORRADO when speaking of different dishes of maize says that »*el huintimimmo*, especie de torta muy tierna hecha con harina de maiz humedecida y blandamente dispuesta en una tortera agujereada y cocida con baho del agua caliente.» P. 42.

[3]) P. 500.

small Indian tribes in the woods north of the Rio Camaquam at the end of the decade 1870—80. The perforated top bowl contained maize, the pot under it boiling water.

C
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I cannot at present tell whence the Chiriguano and the Chané got this cultural element. Besides among these Indians, I have also seen steam-cooking-pots of the same kind among the Mataco-Vejos, who live close to the Chané at the Rio Itiyuro.

The Chiriguano and the Chané have special bowls for roasting maize (fig. 16). I have only seen bowls of the same shape among the Mataco-Vejos. The roasting of maize is commonly practised among the majority of Indians who grow this plant, which is of such great importance to many tribes.

The Chiriguano and the Chané do not know of the babracot. They only use the wooden spit. It is often cleft, as is also the case among the Choroti and the Ashluslay. As the kinsmen of the Chané in Northern Bolivia and the kinsmen of the Chiriguano on the coast of Brazil use the babracot, the question arises: »Why is it not used here?» I suppose this is because the hunting is of no great importance, the fishing not very good, and the fish caught small or, at least, rarely of any size.

C
Ce
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171*

C
Ce
[22]

Pit-ovens are unknown here. When chicha is being made. great pot-spades are used. They are either wooden (fig. 17 A) or made of the hafted shoulderblade of some large mammal. I suppose all Indians who cook their food use something to stir it with. Usually, however, only a plain stick is used. Pot spades of the kind shown here are in use among the Mataco-Vejos, who live near the Chané on the Rio Itiyuro and the Guató[1]) on the upper Rio Paraguay. It is not unlikely at all that the latter have had them from the Chané, for we know from accounts of very early discoverers, that some of the Chané settled on the upper

C
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252
[273]

C
Ce
[171]*

Ce
[175]
[361]

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[1]) MAX SCHMIDT (3), P. 205.

Ce
C
412
252

Rio Paraguay after Garcias marauding expedition, not far from the tract where the Guató now live.

Ce
[140]
[361]

A potspade of the same type from the Yulämaua along the Rio Querarý is shown in an illustration by **Koch-Grünberg.**[1]) I have not seen the shoulderblade potspade in any other tribe.

C
Ce
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252
*171

Similar spades, said to have been used for agricultural purposes, are mentioned by **St. Cricq**[2]) from the Conibo.

C
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Nowadays the Chiriguano and Chané for the most part eat their food with metal spoons which they have got from the Whites. They have, however, wooden spoons as well. They generally eat from earthenware bowls of their own make. They seldom have wooden bowls. I have already treated of the distribution of the wooden bowl and the wooden spoon. (Part 1 map 12 and 13.) They are features of western civilization. Calabash bowls are universally used by the Chiriguano and Chané as drinking vessels, particularly for chicha.

C
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177

Silver bowls — »Cagua» — are occasionally seen at the Chiriguano festivals. These bowls, which are shaped like cloven calabashes, are often furnished with small ears and are made by mestizo smiths to suit the Indian taste.

C
Ce
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[439]

There is in my collection a calabash bowl that has been turned into a ladle by means of a handle. It is from the Chané at the Rio Itiyuro. I have also procured some bowls made of the fruit of the calabash tree from the Chiriguano. The Indians get them from Sta Cruz de la Sierra, for, as far as I know, the calabash-tree is not cultivated within their own area.

C
Ce
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137
*171

Fire-fans of plaited palm leaves are used, though they are rather uncommon. These fire-fans belong to the cultural elements which have come to the Chiriguano and the Chané from the north and east. Later on, when writing about the Indians in northeastern Bolivia, who have sev-

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[1]) T. 2. P. 209.

[2]) P. 287

XVI.

Carrying-implements.

In Part I have already mentioned that the Chiriguano and Chané use carrying-nets, and never baskets, when carrying burdens on long journeys, when bringing home the produce of their fields, or when bearing water long distances. The method is for the band of the carrying-net to be fastened around the forehead, the burden resting on the back. If the water is near the village, they often bear the pitcher on their shoulders and, now and then, at the mission-stations, on their heads. In contradistinction to the negroes, however, the Indians are never seen carrying burdens on their heads while on journeys.

C
Ce
482
415 ●

In Part I there is a map (25) showing the geographical distribution of the carrying-net. As has been proved by the excavations of Uhle[1]) at Arica, the carrying net must be a very old culture element in S. America.

c
ce
[171]*

Calabashes are sometimes put inside a net (fig. 30) in order that they may be carried more easily. A calabash in a net is, of course, easily hung up on a hook in the roof of the hut.

c
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[353]

Earthen vessels are sometimes hung up in the same way. These have then more or less the shape of calabashes. Boman[2]) depicts an earthen vessel hung up in this way from Calama.

In my collection of earthen vessels there is one from the Chiriguano, and another from the Chané, which are intended to be carried by a string running round the vessel

[171]*

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[1]) (10) P. 12.

[2]) Pl. XXVIII, Fig. 180.

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[171]

through the ears. These are reminiscent of the type of vessel employed by the Choroti and Ashluslay for carrying, and which I have traced to the Incan «aryballes». I did not mention these vessels in Part I, as they are not typical vessels of the Chiriguano and Chané. Among the numerous pitchers used for carrying I have only seen these two specimens. I know nothing of their origin, why they were made, or if they were merely acquired from one of the tribes who always use such vessels for bearing water. The latter is, however, unlikely.

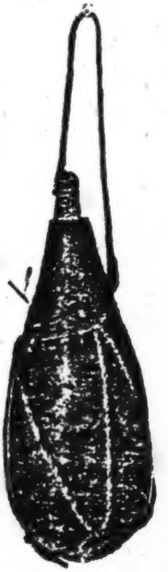

Fig. 30. Calabash in a net with an empty corn-cob as stopper.
R. M. E. 522. $^1/_7$

Table 10.

Calabashes put inside a net.

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171*

Chiriguano, R. M. E. 522.
Chané, R. M. P. 48.
Mataco, R. M. M. T. 114; R. M. M. 1101.
Mbayá, Boggiani (2) P. 112, Fig. 50.
Karajá, Krause Pl. 56. 4 b. c.
Cainguá, Outes (5) and Bruch P. 96.
Indians upper Rio Xingú, Steinen (3) P. 141.[i]
Guayaqui, Kunike Fig. 6.
Ijca, Bolinder (4).
Goijiro, Therese von Bayern (2) Vol. 1, Pl. 1.
Indians Roraima, G. M. 12. 1. 476 (Basket-net.)
Indians Popayan, Uhle (1) Vol. 2, Pl. 4, 1.

[i] [erratum: this should read p.241. Cf. errata sheet, p.245. -Analyst]

C
Ce
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[531]

The Chiriguano, as well as the Chané at Rio Itiyuro, have elaborate pottery of richly varied shapes and often beautifully ornamented. The Chané at Rio Parapiti have plainer pottery. The development of the ceramic art in the various tribes I got to know has differed greatly. The Cháma and the Tambopata-Guarayo who are pretty certainly identical with them, are the only Indians I visited who have no earthenware vessels. The pottery of some tribes is a work of art, while others only make the most necessary household utensils. This is not necessarily connected with the tribe's state of civilization generally. Thus in several respects the Yuracáre stand as high as the Chiriguano but the former have very poor pottery; the latter highly developed pottery. If such peoples were studied archaeologically, the former would yield hardly any remains while the latter would yield many beautiful specimens. Wrong conclusions might then be easily drawn as to the stage of civilization of the two tribes.

C
Ce
*171
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323

Below will be found indicated how many different types of earthen vessels are found among the tribes I visited It will be seen that the Chiriguano and Chané (Rio Itiyuro) have by far the largest number of shapes of earthen vessels.[1]) This is simply due to their having experienced such

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C
Ce
[114]
[126]

[1]) On entering a Chiriguano or a Chané hut, one sees a lot of earthen vessels of which the majority are unpainted. All the vessels of various shape and ornamentation which I have collected are from several hundred Chiriguano and Chané huts. It is a selection out of many thousand vessels which I have made and it shows how pottery varies within the tribes. In most Indian huts there will be found but a small number of different types. Unless we bear in mind that the collection is a selection, it leaves the impression that the pottery of these Indians is of much more varied shape than is really the case. What I remark here of my collection of pottery holds good of nearly all collections in ethnographical museums. When we see a cupboard full of various articles from an Indian tribe, we must not think that all these things are used by every family in the tribe. It is properly a collection of all the different objects used by a large number of individuals.

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strong influence from the area of civilization in the west and above all the south-west.

Over fifty types.	*Over ten types, but under fifty.*	*Over two types, but under ten.*
Chiriguano.	Chané. (Rio Parapiti)	Chacobo.
Chané. (Rio Itiyuro)	Choroti.	Chimáne.
	Ashluslay.	Yuracáre.
	Toba.	Churápa.
	Mataco.	Pauserna.
	Tapiete.	Guarayos.
		Huari.
		Huanyam.
		Cavina.

I am unable here to give an account of all the different shapes of earthen vessels found among the Chiriguano and Chané. Some of them have been depicted by Outes but there are many more. Those depicted here should, however, give some idea of the variations in these Indians' pottery. Some types are local and thus characteristic of certain villages; others are certainly individual. Thus I have seen different women in the same village turn out very different vessels. Some women are noted for making specially fine earthenware. They are celebrated for their pottery far outside their own village.

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The Chiriguano and Chané use earthen vessels for boiling and roasting their food, as receptacles for food and other things, for carrying water, for the serving of food, for the burial of the dead and to whirl the spindle on when spinning. (Only the Chané on the Rio Parapiti.)

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We see that a large number of the earthen vessels here are provided with ears or handles. In Part I of this work I claim to have proved that the ear is a culture-element derived from the Andine area of civilization.

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Occasionally one finds Chiriguano and Chané vessels provided with holes under the edge in the same manner as is usual in calabashes. Strings are then passed through these holes by which to hang the vessels up. This invention was here probably earlier than the ear. Thus, during my excavations at Caipipendi, I found a vessel with these string-holes, while handles and ears were lacking on the pottery found there. The distribution of such string-holes I have endeavoured to indicate on the map, and in the table below.

Such string-holes were known within the old western area of civilization, though they were not in general use. In S. E. S. America they seem to have been the precursors of real handles. Thus MAYNTZHUSEN[1]) writes with regard to the shape of the vessels, from the Upper Parana that they are usually without handles. In place of these there is often a boring through the rim of the vessel, or two outside plugs on opposite sides of it. These plugs were sometimes pierced to allow of a string being introduced. An enlargement of this hole in the plug, large enough for a finger to go through, appears to have developed into the ring-shaped handle which occurs quite sporadically.

The Indians probably got the idea of providing their earthen vessels with string holes from their custom of making string-holes in calabashes. This invention is here evidently older than the real handles or ears. This holds good, pretty certainly, not only for the Chiriguano district, but for large parts of S. E. S. America. It would be interesting to examine the collections of the great museums and then draw a map showing the distribution of earthenware with string-holes. The map published here is probably very incomplete. Its main purpose is to create interest in the distribution of this invention.

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[1]) P. 466.

S:Nordenskiöld E-8,4 (1908-1909. 1913) 1920

SF10 Chiriguano SF10 ●

Chane SF8

South American Indians 53

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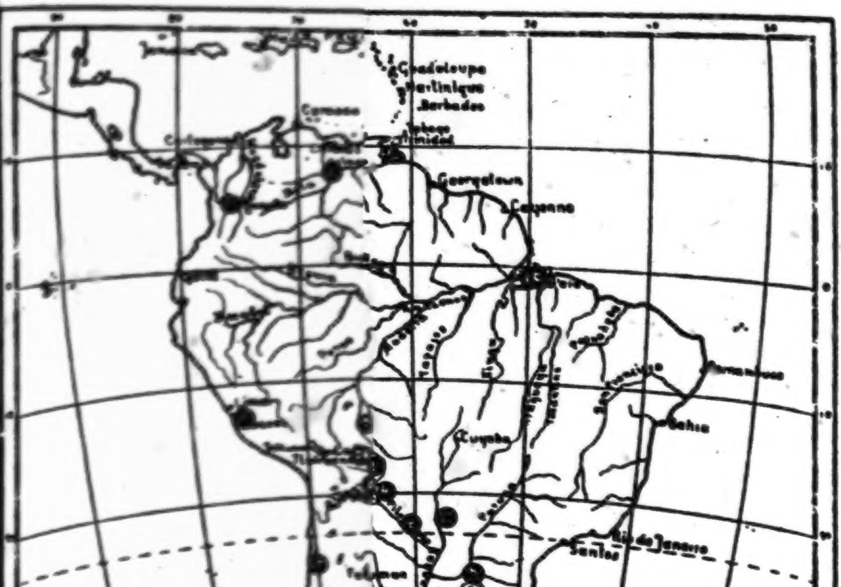
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Santos
Tucuman
Santiago
Buenos Aires
La Plata

Map 13. The distribution of vessels with string-holes.

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Table 16,

102

Vessel with string-holes. Map. 13.

● 415 2. Ashluslay, R. M. A. 1587.
*171 4. Chiriguano, R. M. E. 987.
S 12. Caduvei, BOGGIANI (2) P. 41. Fig. 13.
102 M. Mojos, R. M. T. 577.
415 A. Coast of Peru. Ica. In private collection.
N. Upper Rio Parana, MAYNTZHUSEN P. 466.
O. Delta de Parana, TORRES (2) P. 87.
Ã. Caipipendi, R. M. K. 93.
a. i. Manizales, UHLE (1) Vol. 1, Pl. 2, Fig. 10.
a j. Los raudales Rio Orinoco, MARCANO Pl. XXIX.
a k. Saipina, G. M. 15. 2. 7. Fuerte Samaipata, R. M.
a m. Taltal, Chile, EVANS (1) P. 22.
c. Marajo, NETTO P. 354, 355.
e. Sara, NORDENSKIÖLD (10) Fig. 30.
p. San Blas, OUTES (4) P. 264.

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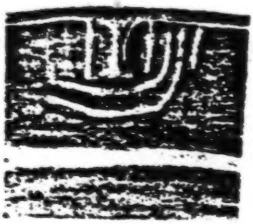

Fig. 39. Human face painted on the border of a vessel from the Chané. Rio Parapiti. R. M.

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Among the many types of earthen vessel used by the Chiriguano and Chané here are several which are highly reminiscent of types we are acquainted with from the Mountain civilization, e. g. double pitchers. (Fig. 41,8) They do not occur in N. E. Bolivia. DEBENEDETTI[1]) has pointed out the similarity between the pottery which he found at Tilcara and that of the Chiriguano. I here reproduce from the work of **Debenedetti** some types of earthenware to which we find answering types among the Chiriguano. (See fig. 48). It must be borne in mind that the Chiriguano country at Cuyambuyo approaches the Humahuaca valley.[1]) The Humahuaca and Chiriguano were allied in the first encounters with the Spaniards.[2])

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[1]) (2).

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[648]

In Part I I have already pointed out the similarity between Choroti and Ashluslay water-pitchers and the Incan »aryballes».

The question arises whether or not all water-pitchers with a narrow neck which can be grasped by the hand are derived from the Mountain civilization. They are not found, as far as I have been able to find, in all N. E. Bolivia, nor in the whole of eastern S. America except by Indians that have been very much influenced by the Whites. The Chiriguano word for water-pitcher is »iru», which is strongly reminiscent of the Quichua name »yuru» for the same kind of earthen vessel.

Pitchers with a bulging neck (fig. 42,1) are common among the Chiriguano and the Chané at Rio Itiyuro. I am acquainted with them from my archaeological excavations at Caipipendi. They are mentioned by **Ambrosetti**[3]) from Tucuman. The type occurs, moreover, within the western area of civilization whence it surely must have come.[4])

Handles shaped like animals or human faces do not occur on the pottery of the Chiriguano and Chané.

The Chiriguano and Chané do not make feet to their vessels as is common on the earthenware from the Mounds in Mojos.

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[1]) Cornejo P. 66.

[2]) Lozano S. 120 »Eran los Homaguacas gente por extremo feroz ...... y mataron à los Sacerdotes, que los doctrinaban, y à muchos Españoles que cayeron en sus manos, infestando con robos, y muertes los caminos publicos, y conferandose con los Chiriguanás» ....

[3]) (8).

[4]) Reiss und Stübel T. 3, Pl. 96, Fig. 17; G. M.

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Only a few vessels are provided with ~~spouts,~~ lips in rims which here seem to be an idea obtained by the Indians from the Whites.

Bowls with holes in the bottom which are used for steaming have already been mentioned in the foregoing. This applies also to bowls for the roasting of maize.

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[177]

The Chané on the Rio Parapiti have small plates which they sometimes use in spinning. I have not seen the like elsewhere. Occasionally one sees, among the most civilized Chiriguano and Chané, fire-pans for holding hot water. (Fig. 43,21). They must have obtained the idea from the Whites.

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The Chiriguano and Chané understand the art of painting earthenware before burning.[1]) I have already, in Part I, endeavoured to show the geographical distribution of this invention. Whether it was known to the Chané and Chiriguano before they settled in this tract cannot be decided. The pottery I found in the archaeological excavations at Caipipendi is unpainted.

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The Chané at Rio Itiyuro sometimes paint the edge of earthen vessels after burning with resin of palo santo. This is never seen among the Chiriguano and the Chané at Rio Parapiti. As such painting is common among several tribes in the Chaco, it is possible that the Chané at Rio Itiyuro got the idea from there. The Chiriguano and the Chané at Rio Itiyuro often varnish the painted vessels after burning with a kind of gum called by the Chiriguano — staragüirisi ».

The Chiriguano and Chané also ornament their earthenware by finger-impressions. This method of ornamentation has an eastern extension in S. America. A map showing its distribution is published in Part I.

The ornamentation painted on earthenware is seen in the illustrations. The Chané at Rio Parapiti usually have very plain ornamentation.

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[1]) For this purpose brushes of Aguti hair are used. (See also WIENER P. 82).

2[erratum corrected. See errata sheet p.245.]

415 Fig. 40.

1.	R. M. E.	843.	Tihŭipa.	Pot.
2.	» » »	844.	»	»
3.	» » »	847.	»	»
4.	» » »	839.	»	»
5.	» » »	813.	»	Vessel for serving maize-beer.
6.	» » »	809.	»	» » » » »
7.	» » »	870.	S. Rosa.	Bowl in which to keep salt, etc.
8.	» » »	838.	Tihŭipa.	» » » » » » »
9.	» » »	961.	Boycovo.	Pitcher.
10.	» » »	928.	Itatique.	Vessel for serving maize-beer
11.	» » »	877.	S. Rosa.	Bowl to eat out of.
12.	» » »	855.	Tihŭipa.	Vessel for keeping seed in.
13.	» » »	814.	»	» » serving maize-beer.
14.	» » »	801.	»	» » » » »
15.	» » »	872.	S. Rosa.	Bowl to eat out of.
16.	» » »	858.	» »	Vessel for maize-beer.
17.	» » »	840.	Tihŭipa.	Pot.
18.	» » »	1026.	Yacuiba.	Vessel for maize-beer.
19.	» » »	802.	Tihŭipa.	Pitcher to carry water in.
20.	» » »	942.	Itatique.	Vessel for serving maize-beer.
21.	» » »	926.	»	» » » » »
22.	» » »	1024.	Yacuiba.	» » » » »
23.	» » »	1022.	»	» » » » »
24.	» » »	869.	S. Rosa.	Pot.
25.	» » »	857.	Tihŭipa.	Bowl used for steam-cooking.
26.	In private collection.		»	Mug.
27.	R. M. E.	1032.	Ivu.	Vessel for maize-beer.
28.	» » »	1035.	»	Bowl to eat out of.
29.	» » »	968.		Pitcher.
30.	» » »	832.	Tihŭipa.	»
31.	» » »	878.	S. Rosa.	Bowl to eat out of.
32.	» » »	827.	Tihŭipa.	Pitcher.

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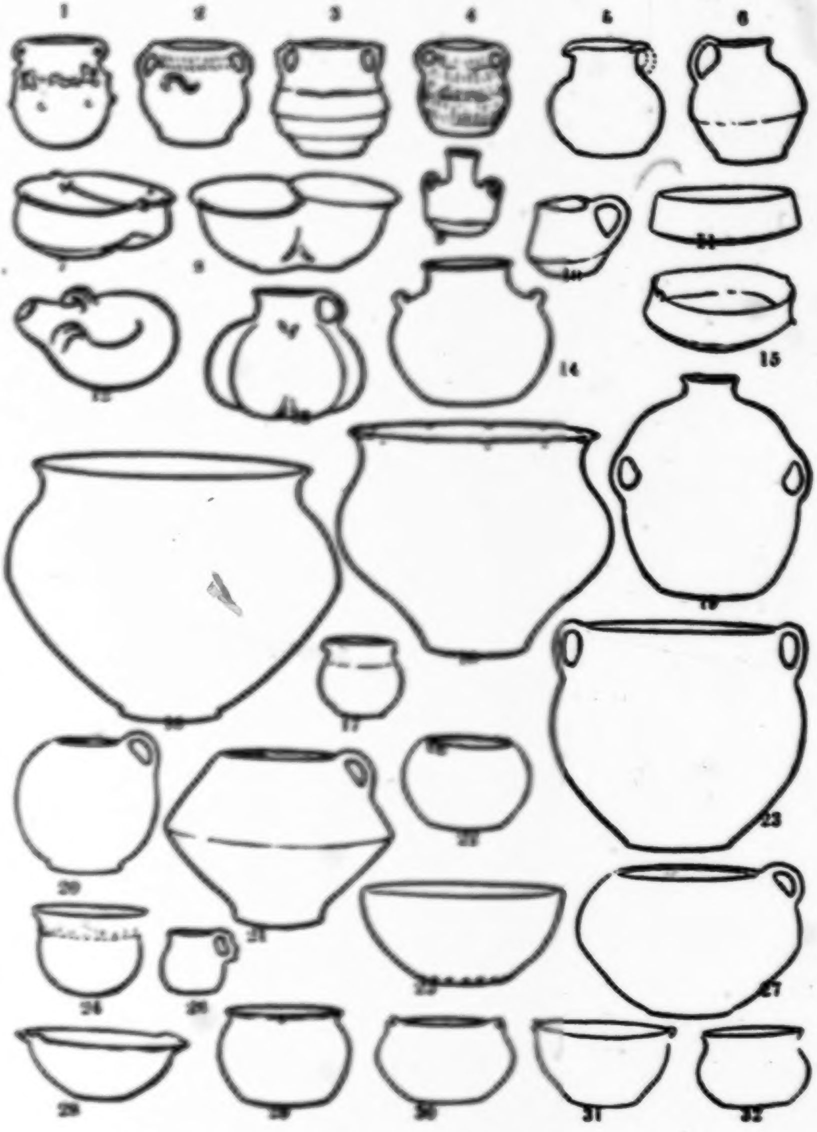
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Fig. [illegible]. Vessels of different shapes from the Chiriguano.
Only variations in shape are depicted. Ornamentation not depicted. 1/8

● 415 Fig. 41.

1.	R. M. E.	786.	Caipipendi.	Vessel for keeping seed in.
2.	» » »	772.	»	Pitcher made for a festival.
3.	» » »	743.	»	Waterpitcher.
4.	» » »	747.	»	Pitcher for serving maize beer
5.	» » »	727.	»	» » » » »
6.	» » »	726.	»	» » » » »
7.	» » »	780.	»	Vessel for keeping seed in.
8.	» » »	778.	»	Vessels for festivals.
9.	In private collection		»	
10.	R. M. E.	783.	»	
11.	» » »	774.	»	
12.	» » »	775.	»	
13.	» » »	787.	»	
14.	In private collection		»	
15.	R. M. E.	770.	»	Bowl to eat out of.
16.	» » »	736.	»	Pitcher.
17.	» » »	732.	»	»
18.	» » »	746.	»	Vessel for serving maize-beer
19.	» » »	696.	»	» » maize-beer.
20.	» » »	733.	»	Pitcher.
21.	» » »	734.	»	»
22.	» » »	793.	»	Bowl to eat out of.
23.	» » »	759.	»	Vessel for keeping seed in.
24.	» » »	761.	»	Bowl to eat out of.
25.	In private collection		»	Vessel for serving maize-beer
26.	R. M. E.	794.	Tihñipa.	» » maize-beer.
27.	» » »	797.	»	» » » »
28.	In private collection.		Caipipendi.	Small bowl to eat out of.
29.	R. M. E.	788.	»	Pitcher.
30.	» » »	704.	»	»
31.	» » »	728.	»	Vessel for serving maize-beer.
32.	In private collection.		»	» » » » »

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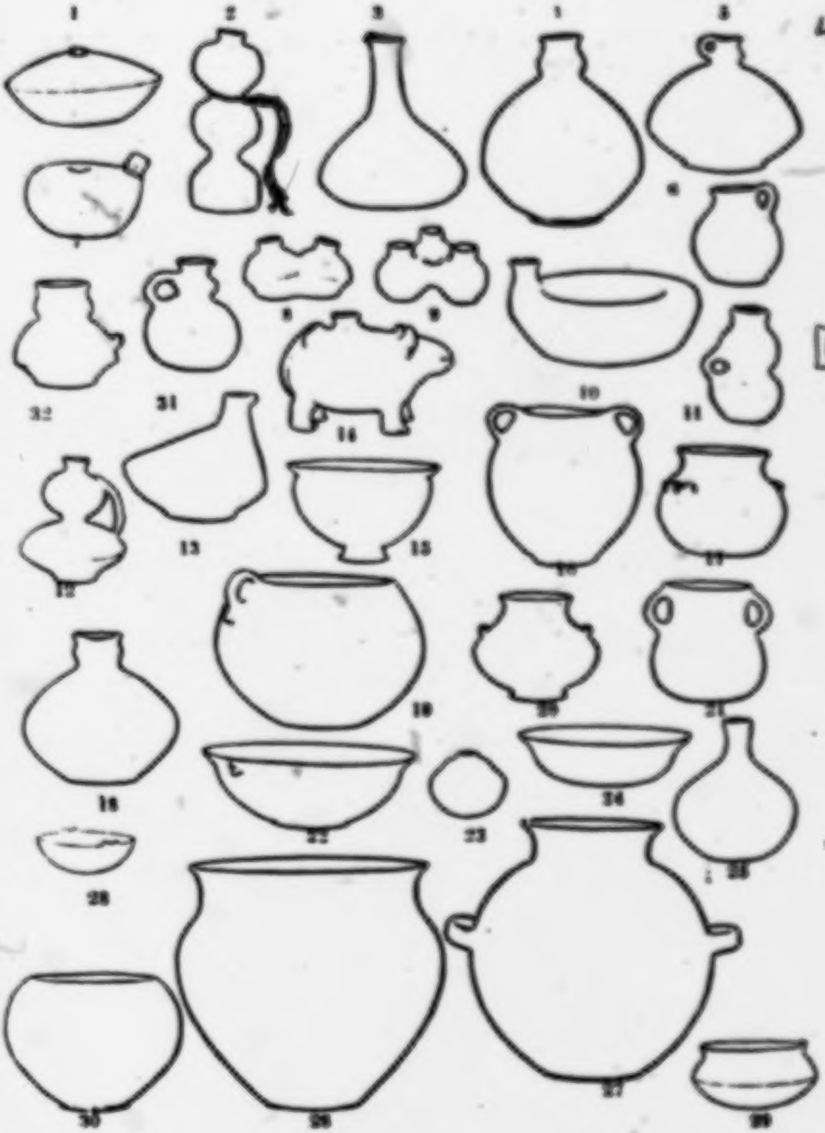
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Fig. 41. Vessels of different shapes from the Chiriguano. Only variations in shape are depicted. Ornamentation not depicted. 1/8.

Fig. 45.

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1.	1/6	R.	M.	F.	945.	Yatavéri.	Vessel for maize-beer.
2.	»	»	»	»	1003.	Itapembia.	» » » »
3.	»	»	»	»	976.	Esperanza.	» » » »
4.	»	»	»	»	912.	Itatique.	» » » »
5.	»	»	»	»	914.	»	» » » »
6.	»	»	»	»	975.	Tihũipa.(?)	» » » »
7.	1/10	»	»	»	1025.	Yacuiba.	» » » »
8.	1/8	»	»	»	860.	S. Rosa.	» » » »
9.	»	In private collection.				Itatique.	Bowl to eat out of.
10.	1/10	R.	M.	F.	1032.	Ivu.	Vessel for maize-beer.
11.	1/8	»	»	»	926.	Itatique.	» » » »
12.	1/10	»	»	»	1001.	Itapembia.	» » » »
13.	1/8	»	»	»	921.	Itatique.	» » » »
14.	»	»	»	»	862.	S. Rosa.	» » » »
15.	»	»	»	»	737.	Caipipendi.	» » » »
16.	»	»	»	»	739.	»	Mug for drinking maize-beer.
17	»	»	»	»	770.	»	Bowl to eat out of.
18.	»	»	»	»	831.	Tihũipa.	Vessel for maize-beer.
19.	»	»	»	»	987.		For keeping knicknacks in.
20.	»	»	»	»	787.		Vessel for maize-beer.
21.	»	»	»	»	916.	Itatique.	Mug for drinking maize-beer.
22.	»	»	»	»	872.	S. Rosa.	Bowl to eat out of.
23.	»	In private collection.					Vessel for maize-beer.
24.	»	R.	M.	F.	728.	Caipipendi.	Vessel for serving maize-beer.
25.	»	»	»	»	811.	Tihũipa.	» » » » »
26.	»	»	»	»	696.	Caipipendi.	» » » » »
27.	»	»	»	»	727.	Caipipendi.	» » » » »
28.	»	»	»	»	964.	Caipipendi.	» » » » »
29.	»	»	»	»	929.	Itatique.	» » » » »
30.	»	»	»	»	919.	Itatique.	» » » » »
31.	»	»	»	»	1009.	Itapembia.	» » » » »

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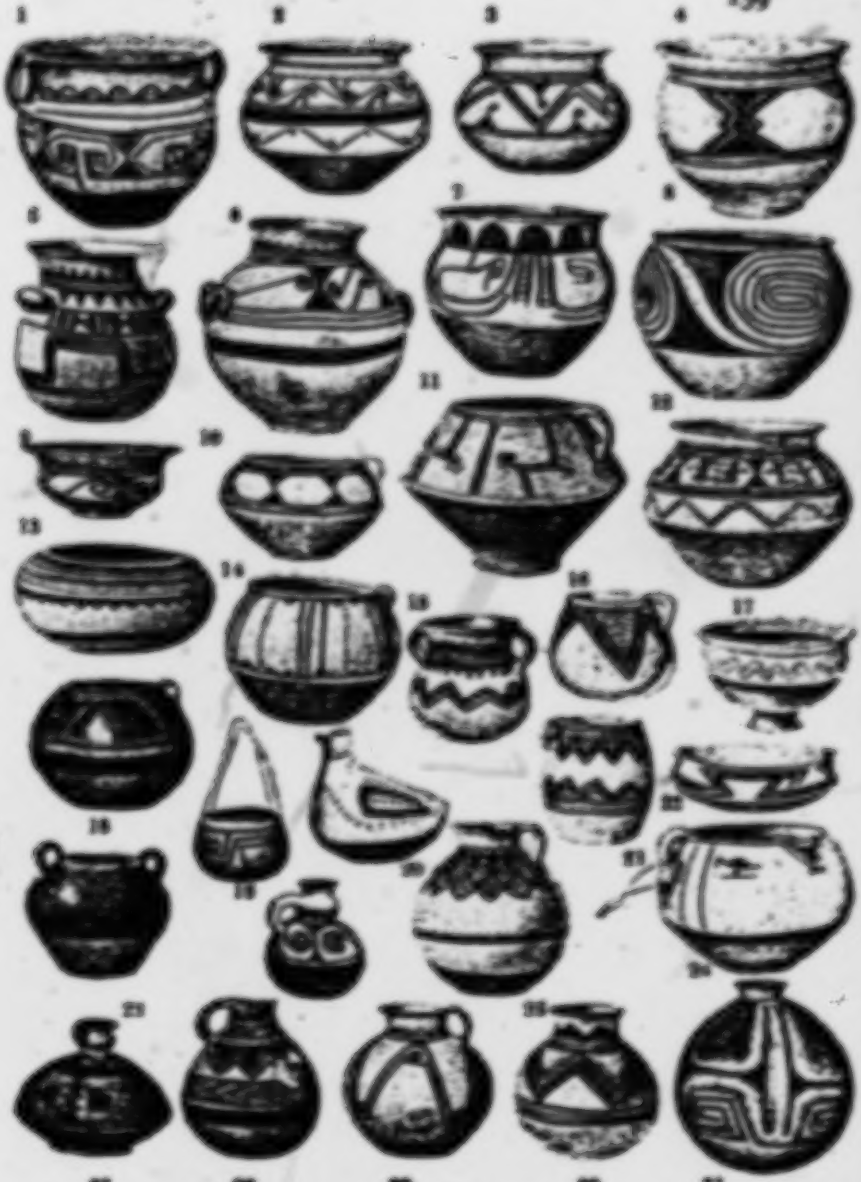
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Fig. 45. Vessels from Chiriguano.

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Fig. 46.

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1.	$^1/_8$	R. M. H.	68.	Campo y Duran.	Vessel for maize-beer
2.	$^1/_{10}$	» » E.	1047.	Itapenbia.	» » » »
3.	»	» » E.	1049.	Caipipendi.	» » » »
4.	$^1/_8$	In private collection.		Campo y Duran.	» » » »
5.	$^1/_{10}$	R. M. H.	76.	Aquairenda.	» » » »
6.	$^1/_8$	» » H.	111.	Piquirenda.	» » » »
7.	»	» » F.	859.	S. Rosa.	» » » »
8.	$^1/_{10}$	In private collection.		Campo y Duran.	» » » »
9.	»	R. M. H.	155.	»	» » » »
10.		In private collection.			Water-pitcher.
11.	»	R. M. P.	329.		Pot.
12.	»	» » H.	89.	Piquirenda.	Water-pitcher.
13.	»	» » P.	337.		Vessel for maize-beer
14.	»	» » P.	323.		» » » »

5:Nordenskiöld E-5,4 (1908-1909. 1913) 1920

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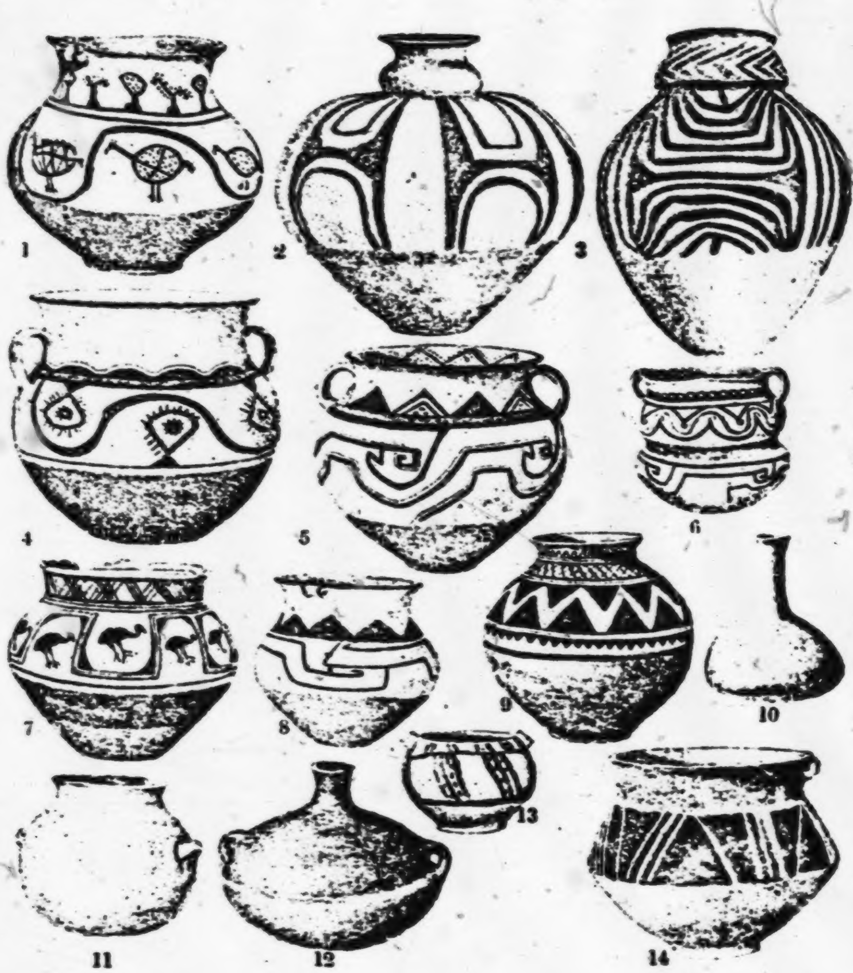
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Fig. 46. Vessel from the Chiriguano and Chané.

E = Chiriguano. H = Chané, Rio Itiyuro. P = Chané, Rio Parapiti.

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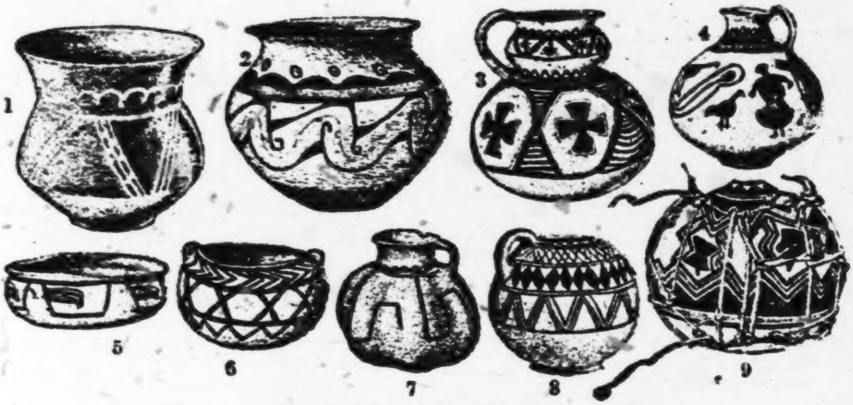

Fig. 47. Vessels from the Chiriguano and Chané.
H = Chané, Rio Itiyuro. E = Chiriguano.

1. $^{3}/_{16}$	In private collection.	Chané, Rio Parapiti.	Vessel for maize-beer.
2. $^{1}/_{8}$	» » »	Campo y Duran.	» » » »
3. $^{1}/_{12}$	R. M. H. 106.	Campo y Duran.	» » » »
4.	In private collection.		» » » »
5.	» » » »		Bowl to eat out of.
6. »	R. M. H. 123.	Campo y Duran.	Bowl.
7. $^{1}/_{8}$	» » E. 814.	Tihüipa.	Vessel for maize-beer.
8. »	» » E. 942.	Itatique.	» » » »
9. »	» » E. 960.	S. Antonio.	Vessel in which to carry maize-beer or water on expeditions.

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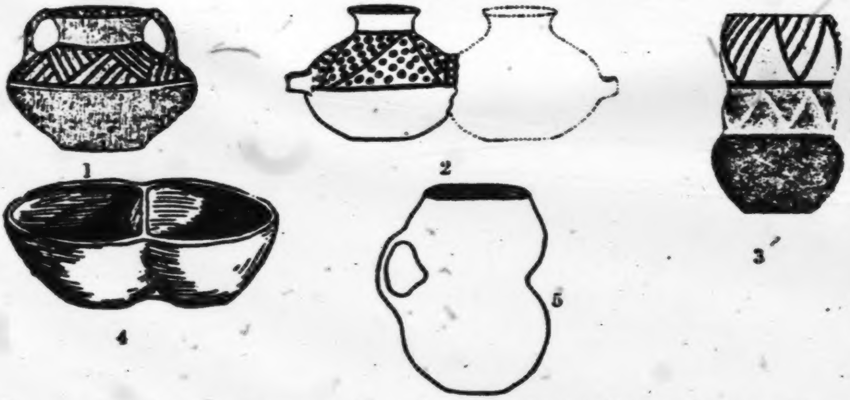

Fig. 48. Vessels from Tilcara (1, 2, 3, 4), and Juella (5), Quebrada de Humahuaca. After DEBENEDETTI.

c
Their spindles are of the Bakaïri type with a knob. (See Part. I map 35). The spindle discs are sometimes of stone. The Chané at Rio Parapiti sometimes use when spinning a small earthen plate made for the purpose, on which the spindle is whirled. ce
283

The preparing of leather.

c
The Choroti and Ashluslay have no knowledge of tanning, where as the Chiriguano, Chané, Toba and Tapiete have. They use the bark of Piptadenia and other trees. ce
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177

These Indians have, in all likelihood, learnt the art of tanning from the Whites who, in these tracts, are more skilled in leatherwork than in any other trade. Tanning seems to be unknown to all Indians in S. America who are either untouched or but slightly influenced by White civilization. 171*

The carving and ornamentation of calabashes.

c
The Chiriguano Indians, as well as the Chané make very great use of calabashes. They are used as receptacles for water and maize-beer; as boxes, humming-tops, bowls and, above all, as drinking-vessels. At festivals maize-beer is handed round in elaborately ornamented calabashes. ce
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322/

Sometimes the calabashes are provided with lids. These are so made that lid and box are of the same fruit. Now and then star-shaped lids occurs. Lids with a shutting arrangement of the type shown in Fig. 50 A are characteristic of these Indians.

I published in Part I a map showing the distribution of calabashes with lids. From this map we see that these are probably a culture-element which the Indians east of the Andes received from the western area of civilization.

I scarcely think, at any rate, that the star-shaped lids can be cut out so as to fit tight on the box, save with a metal tool. It could hardly be done with a stone or bone implement.

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The Chiriguano and Chané calabashes are ornamented with engraved, burnt-in and painted figures. The distribution of engraved ornamentation cannot, at present be as certained. As I maintained in Part I, pyrograving seems to be a culture-element of western origin. The art of painting calabashes with urucu mixed with oil is unknown to the Choroti and Ashluslay, as also to the other Indians whom I got to know personally, with the exception of the Pauserna.

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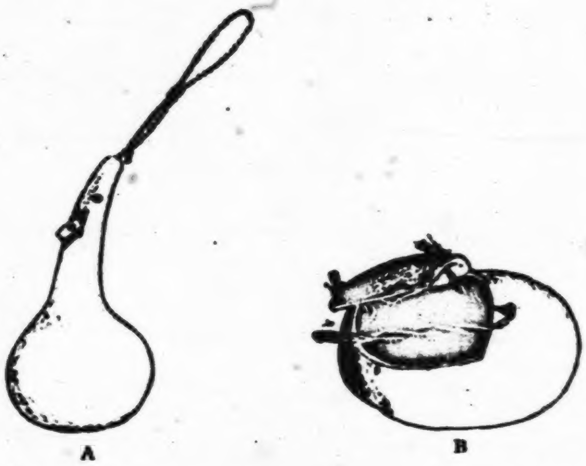

Fig. 30. A. Calabash with lid. Chané, Rio Parapiti. R. M. P. 35. 1/6.
B. » » » Chiriguano. R. M. E: 508. 1/3.

In the absence of sufficient comparative material from the Andine culture-area, I will not here seek to establish whence the Chiriguano and Chané got the ornamentation which adorns their calabashes, nor in what measure it has been independently elaborated by them. A calabash with engraved animal figures is reproduced here.

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The Chané who dwell at Rio Parapiti have but little ornamentation on their calabashes, and that little is plain.

This contrasts with the Chiriguano and the Chané at Rio Itiyuro and is certainly owing to the poverty of the first-mentioned.

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Sometimes the Chiriguano and Chané calabashes are surrounded by a net for greater convenience of carrying. I have already dealt with these in the foregoing.

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The stoppers of calabash-bottles are generally pieces of empty corn-cobs. These are now and then used also as stoppers for earthen-vessels. The Choroti and Ashluslay, as a rule, make use of wax, which material is little used by the Chiriguano and Chané.

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[237]
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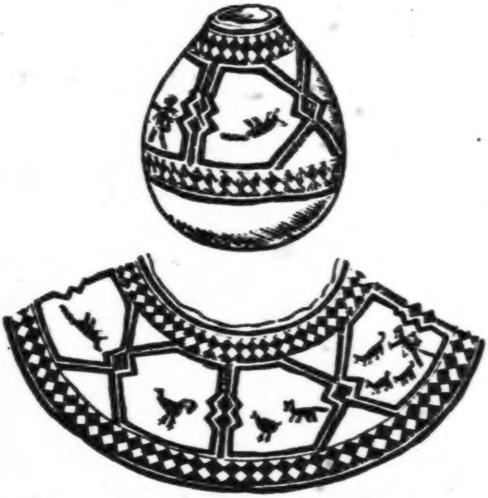

Fig. 51. Calabash. Chiriguano. R. M. 523. 1/8.

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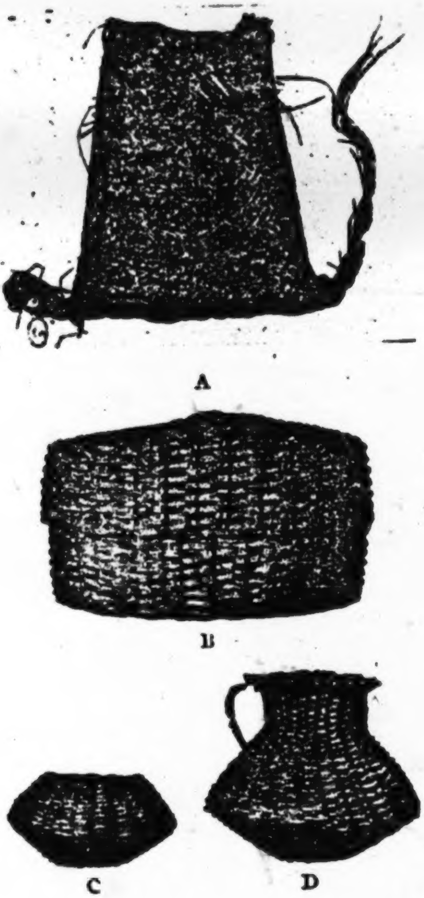

Fig. 53. Baskets from the Chiriguano.

A = R. M. E. 885.
B = » » » 507.
C = » » » 174.
D = » » » 542.

/159 cont./

In the village of Cuevo alone 60 out of 200 persons died within 114
a short time. I visited the 140. They were as gay as ever. 164 [165]
Spirits and beer were consumed in quantities. [275]

Father Bernardino was never given credit for this work, but 797
rather the medicine men, who had bewitched the sickness so that 756
it would not come to Ivu. The white colonists, too, occasionally
had the medicine men come in order to /Fig. 78 appears here/ drive
away the sickness. They did not believe in the vaccine either.

With Ivu as the starting point, I made a trip into the 114

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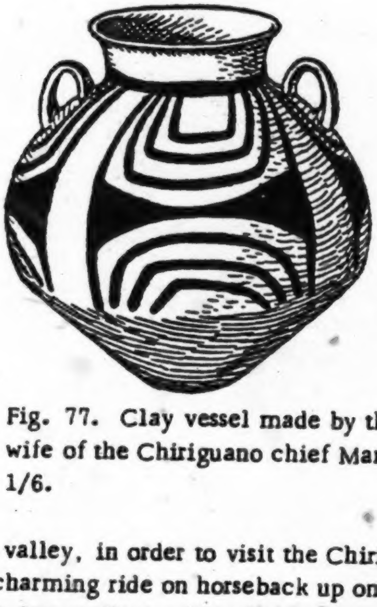

Fig. 77. Clay vessel made by the wife of the Chiriguano chief Maringay. 1/6.

Igüembe valley, in order to visit the Chiriguano chief Maringay. 114
It was a charming ride on horseback up on the high crests and [133]
down into deep valleys, through an often grandiose, colorful
landscape. These valleys are poor in forests. Only in a well- [137]
protected ravine in which a brook trickles forth is the vegetation
luxuriant.

I soon became very good friends with old Maringay. The 123
old man was conservative, clung to the old customs, and felt 157
that the Indians should be on good terms with the whites, but 178
should preserve their old habits and customs unchanged. His 642
village was extraordinarily interesting and very rich in old, fine 000
things.

/159 cont. /
things. The ceramics /160/ which I found there belong among 323
the very best that I saw among these Indians (Figs. 77 and 78).

From Maringay I returned to Ivu by way of the mission station 361
of Santa Rosa. It has a wonderful location. Like an old fortress, 797
it is built on a narrow hill. Below it, in long rows, lie the [114]
grayish-brown Chiriguano huts surrounded by low woods of [342]
Mimosaceae, cacti, small algorrobas, and other fine-leaved [137]
trees. This woodland is seldom so dense than one cannot easily
get out of it without a bush knife. When I was in Santa Rosa, 132

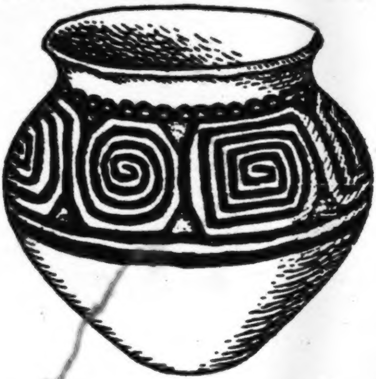

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Fig. 78. Clay vessel made by the wife of the Chiriguano chief Maringay. 1/7.

it was the dry season and everything was burned up. Here too, 132
however, rain probably entices the green out of the dry earth.
Sometimes the rain is so long in coming, however, that the [731]
Indians do not get any maize and that means -- hunger.

From Santa Rosa one looks far out over the mountains and 133
across the great plain of Boyuovis, over the country that was 648
the native land of the Chiriguano, where, at Curuyuqui, they
fought their last battle with the Christians, who assume the
right to rob all weaker peoples.

After my excursion to Maringay I left the land of the 114
Chiriguano and Chané and paid my second visit, already
described in this book, to the Choroti and Ashluslay.

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/178/

Now and then one sees a seat carved out of wood (Fig. 85) in a shape especially familiar from the Brazilian Indians.

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[353]

A great many clay vessels of all dimensions are always standing along the walls of the huts. Some of them are so large that a man could crawl into them. There /179/ are pots, there are roasting bowls, there are handsomely painted vessels which are brought out for the festivals, and there is the treasure pot, in which the housewife keeps all the valuables and souvenirs of the family. In it, if the home is "well-to-do," lie clothing,

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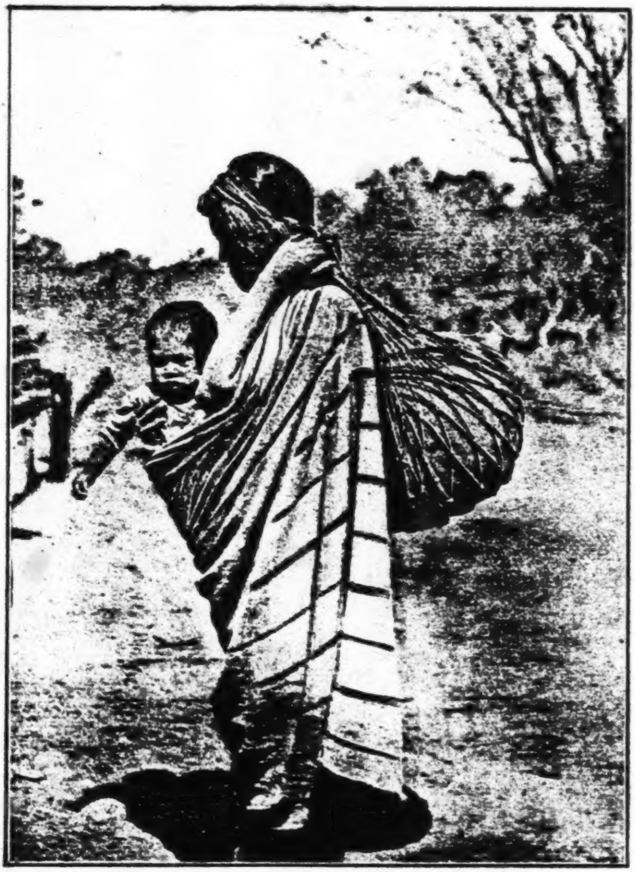

Fig. 87. Chané woman. Rio Parapiti. She has a water jug in the carrying net.

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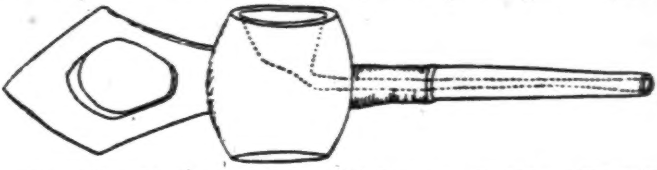
SF10
Chane SF8

/179 cont./ C Ce
ornaments, bowls of silver and necklaces of turquoise and 415
chrysocolla, and many other things. 556

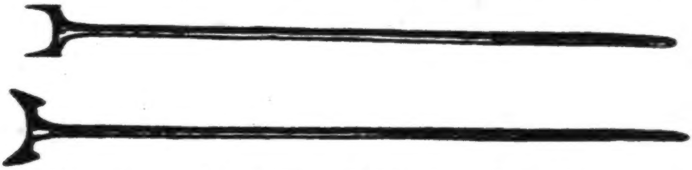
It is quiet very early in the villages. People do not talk all night, as in a Choroti or Ashluslay village. The young men and the unmarried young girls do not rove about in order to lie together. The virtuous Chané and Chiriguano girls are guarded by their mothers, do not seek adventure, and do not admit gentlemen callers. There are no nocturnal meals, as among the Choroti and Ashluslay. In these villages people sleep at night, that is, if they

C Ce 512 836 C Ce 512 264 273



C 276

Fig. 88. Tobacco pipe. Chiriguano. Caipipendi. 1/2.



C 412

Fig. 89. Spade handle. Chiriguano. Ca. 1/15.

C Ce 512 [264] [273] [533] [765]

are not busy brewing maize for a festival.

Very early in the morning one is awakened in almost all villages by songs of lament. There is always someone who has lost a relative and mourns him loudly. If someone has died in the village, it is uncomfortable in the village for a person who likes to sleep late.

/180/ The women get up at the earliest hour in the morning, the men somewhat later, and the daily work begins. The first thing that the women do is to fetch water and take a bath, a truly refreshing bath.

C Ce 515 512

They carry the water jugs in various ways. On the Rio Itiyuro the Chané women carry them on the shoulder, on the Rio Parapiti in a carrying net (Fig. 87). The latter custom is also

C Ce 512 482

/189 cont./ C Ce 252

Meat is cooked with maize as a soup or roasted. Before it is placed in the pot, it is washed clean. Fish are roasted over the fire in clamps /Klammern/ or in maize leaves. The small fish which I saw prepared in this way are taken out only when they are eaten. If there are many fish, they are dried for future use. C Ce [251]

Especially in times of famine, various /Fig. 92b appears here/ wild plants are also eaten. Salt, which is now bought from the whites, is used for food. In former times it was fetched from the rock-salt pits on the San Luis, on the way from the city of Tarija to the Chaco, or salt was made from saliferous earth, "yukiu." The earth mixed with salt was placed in a bowl of water, sank to the bottom, and the salt water was used. C Ce 263 317 [439]

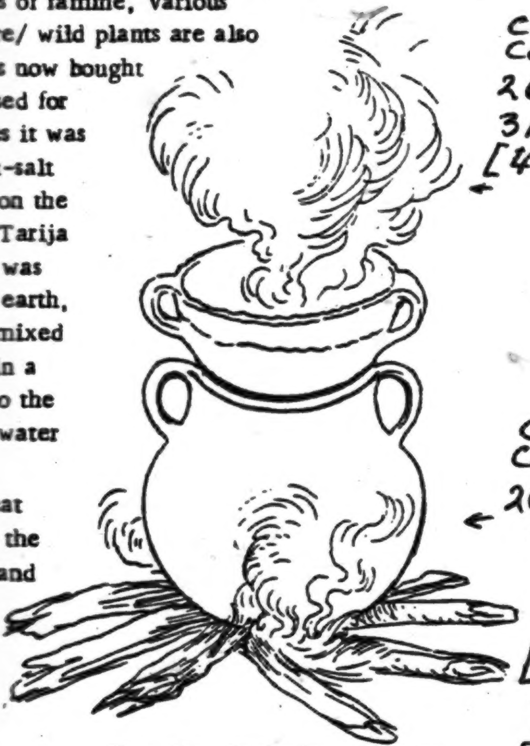


Fig. 92a. Steaming apparatus. Chané. Rio Itiyuro.

C Ce 264

Women and men eat separately. At home the men usually eat first and then the women and children. The Indians want to be left alone when they are eating. It is therefore extremely ill-mannered to speak to them during this important activity. C Ce [576] Ce [415] [252]

/190/ As far as I saw, they do not eat out of a common dish, but each one eats out of his bowl. After meals they rinse their mouths and wash their hands by spitting the rinse water over their fingers. C Ce [415]

/214 cont./

577 831 175 entirely untouched by the civilization of the whites, an opinion which I shall reproduce here verbatim:

"Ce qui m'a fort surpris, c'est que dans la licence où ils vivent, je n'ai jamais remarqué qu'il échappat à aucun homme la moindre action indécente à l'egard des femmes, et jamais je n'ai oui sortir de leur bouche aucune parole tant soit peu déshonnête

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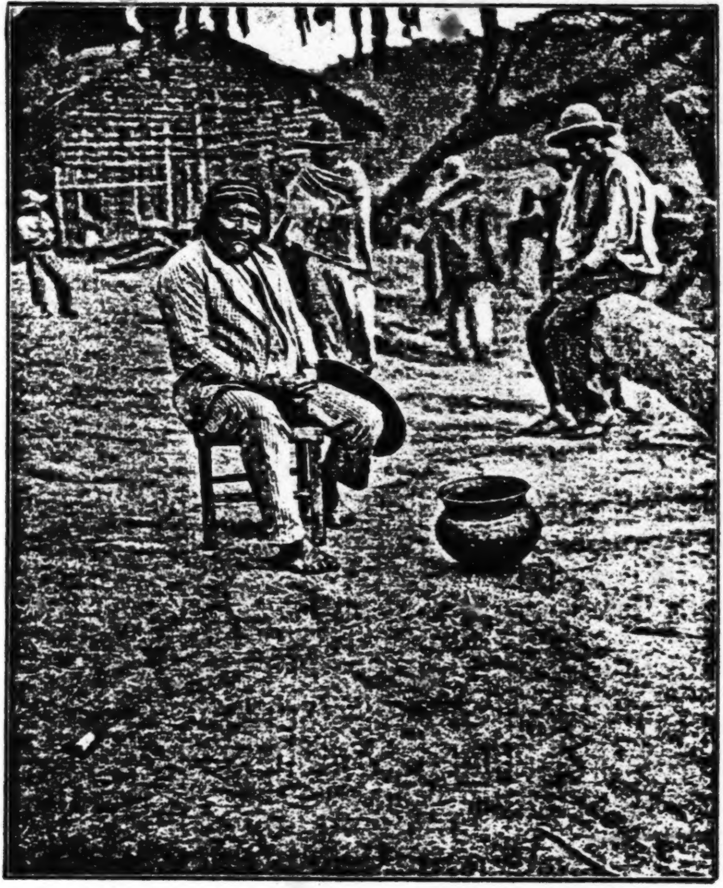

Fig. 111. The Chiriguano chief Mandepora.

577 831 175 /What surprised me very much is that in the freedom in which they live I never noticed the slightest indecent behavior on the part of any man with regard to women, and never did I hear from their lips any word that was the least bit immodest/."

Ce 752 /217 cont./
of boiling the water because they wanted to kill the macroscopic animals in it. The Chané sometimes use fresh leaves to bandage wounds.

Ee 764 Ee [763] If, in spite of the medicine man's efforts, the /218/ spell cannot be lifted and the Chané or Chiriguano Indian dies, he or she is buried under the hut in a large clay vessel. Before the dying one is quite dead, or immediately after death, he is flexed so that the knees come under the chin and the arms are laid crosswise over the chest. On the Rio Parapiti there lived for many years a Chané Indian who had been flexed in this way, but who, before he was stuffed into the grave urn, was saved by a white man. Ee [775] The deceased, dressed, with a water calabash at his knee, is set into the vessel. The water is supposed to be taken along by the deceased when he wanders about on the mountains, the Chané chief Vocapoy told me. The vessel is buried in the hut, and another vessel is put upside down over it as a lid.

Ee 768 At Tatarenda, near Yacuiba, I heard that the hut is burned down after the burial. This, however, is not the usual thing. On the contrary, the hut is abandoned for a time after the burial and then moved into again later on. Ce 764 This is what happened, for example, in a Chané village on the Rio Itiyuro, where I was shortly after a burial.

Cce [415] The large maize-beer vessels (Fig. 113) are used as coffins. If there is a shortage of vessels, burial often takes place in another way. In a Chané village, Copéri, on the Rio Parapiti, a child was buried in a skin under the hut shortly before my arrival.

These Indians spend their lives on the graves of their dead relatives, and often the hut is so full that a later burial in old pots becomes necessary.

"The Christian carries his dead far from his house. We Indians, who feel a great love for them, keep them in our houses." That is approximately what Vocapoy once said to me when the conversation turned to this strange method of burial.

/218 cont./

766 754 825 If a Chiriguano is killed by a jaguar, he is /219/ buried with his head downward, so that he will not go about as such an animal. This notion of a jaguar who was a human being is widespread, especially among the Quichua /Quechua/, where this strange animal, as has been mentioned, is called uturunco (cf. p. 12 /untranslated/). 763 825 If a fox howls at night near the village, someone will die.

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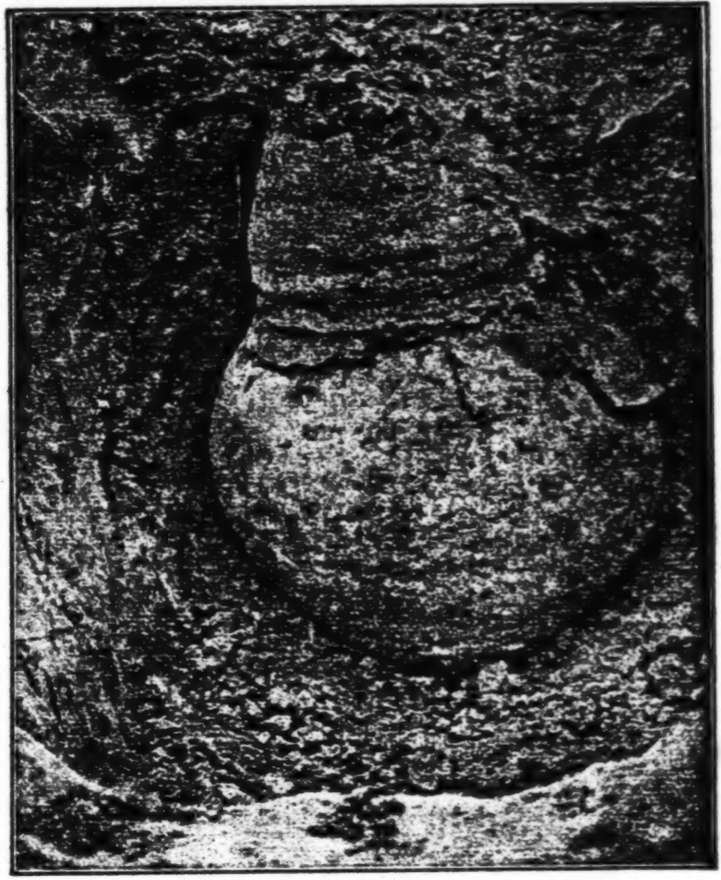

Fig. 113. Chiriguano grave.
Caipipendi.

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C Ce /231 cont./

565 One cannot speak here of rich and poor in the same village,
556 though there is the beginning of a nobility. On the other hand,
621 there are rich and poor villages. There are relatively wealthy
individual Indians, but they, like Taco, live like the whites.

Ec The chief is the judge and in former times was the leader
622 701 of the fighting men.

642 Vocapoy told me murder was punished by sentencing the
643 murderer to work up to half a year for the family of the one slain.
Ce A thief gets up to 50 lashes and is sent to another village so that he
682 will not be killed. According to Vocapoy, it is the duty of the
chief to prevent blood revenge by sending away the offenders so
that they will not be murdered. The murder of father, mother, or
Ce child is, according to his assertions, unknown in his region.

692 According to Batirayu,
643 whose statements are more
681 reliable than those of /232/
C Vocapoy, the high chief of
531 the Chané on the Rio Parapiti
● 415 deals with no offenses other
Ce than murder, seduction of
682 another woman, and bewitchment. Murder with
poisoned chicha, "bád-dyási,"
Ce occurred in former times among the Chané. Murderer and be-
684 witcher were burned. The seducer of a woman was deprived of all
Ce 685 his possessions. For the rest, theft and other offenses were settled
681 by means of duels. If a person stole something, the injured one
and the thief called their relatives together, and they fought on the
open plaza in the village.

Fig. 115. Calabash.
Chiriguano. Itapenbia. 1/6.

Ec 177 The administrative authorities of the whites are now inter-
Ce vening more and more in the legal affairs of the Indians.

643 622 In war with other tribes the chief gives the orders, as they
721 did in the uprisings of the Indians against the whites.

Ce According to Vocapoy, the chief owns the land for the
423 tribe. Batirayu said the land rights are arranged so that everyone
622 plants what he wishes. Land that has been cultivated has its owner,
643 even if it has lain fallow for years.

/234/

Chapter Fifteen

Drinking Bouts among the Chané and Chiriguano

Ec 178 527 273 [538] [805]

If a Chané or Chiriguano tells a legend, he often begins it thus: "A long time ago there was once a great drinking bout." If he reports something that happened, some illness of a relative or the like, he will say: "It was before or after the festival." Indeed, at these festivals one hears and sees most of what has remained of the old culture of these Indians. This is when the most beautiful clay vessels appear, this is when one sees costumes from olden times, this is when the stone ornaments are taken out of the treasure jars.

Ec 273 •415 527 531

Among us a housewife is proud if she can show her guests beautiful tablecloths and fine porcelain. The Chané and Chiriguano women think the same way. At festivals each woman wants the maize beer at her house to be brought out in clay vessels more beautiful than those of her neighbors and to be served in calabashes that are more elegantly decorated than those of anyone else.

Ec 531 [527] [323] [462]

That is why, before each festival, the women are occupied with making clay vessels and the men with the decoration of calabashes. In the Chané and Chiriguano villages one sees magnificent collections of clay vessels. A few women in particular know how to paint these with superior skill and elegance. One almost never sees three jugs that are entirely alike. Each one tries to appear at the festival with something original, to paint something new and pretty. As far as linear /235/ ornamentation is concerned, they know how to vary the old ornamentation, but they do not know how or do not want to free themselves from them and open up new paths. The /Fig. 116 appears here/ Indian woman is conservative in her art and is able /236/ to free herself from the models of her mother's or grandmother's time only if she takes her motifs directly from nature and paints animals. By no means all the women in the villages are artists. There are some whom nature has endowed with the gift of art, and some true bunglers. Who can paint clay vessels as one of the wives of

Ec [181]

6: Nordenskiöld--95 E-5 (1908-1909) 1912 SF10 Chiriguano SF10
Chane SF8

C Ce /244 cont./
28 Of the various industries, pottery stands particularly high
[323] among the Chiriguano and Chané (see the illustrations). They
[531] are also skilled weavers and decorators of calabashes. Basketry
[184] occurs, but chiefly in the northern part of their region. Feather
work is no longer done at the present time. Only ropes and fish
Ce nets, and on the Rio Parapiti hammocks and carrying nets, are
[439] made with caraguata bast. The bags of this material, so characteristic of the Chaco tribes, are never made by the Chiriguano and Chané, but are occasionally acquired by trade between the tribes.

Ce 323 Among the Chané on the Rio Itiyuro I followed the making

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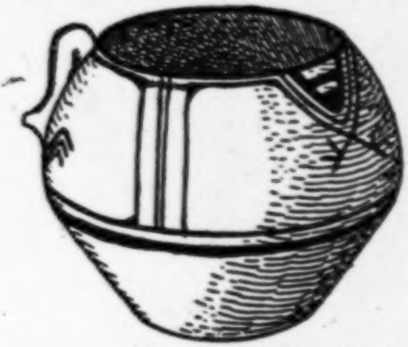

Fig. 121. Clay vessel.
Chiriguano. Caipipendi
valley. 1/4.

Ce 323 of pots. The clay is ground and mixed with pounded, fired
Ce potsherds, so that the vessel does not fall apart during the firing.
The clay vessels are built up out of rolls in customary Indian
[413] fashion. For smoothing a mussel shell or a maize cob without
[804] kernels, as well as a narrow little bamboo stick, is used. The
maize cobs make parallel, fine scratches (1). The bamboo stick

Ce [172]

1. From similar scratches on clay vessels which one finds in archaeological diggings, one can see that the makers of the clay vessels had maize. I have seen this, for

6: Nordenskiöld--100 E-5 (1908-1909) 1912 SF10 Chiriguano SF10
Chane SF8

Ee /248 cont./
439 When we present a collection from the Chiriguano and Chané,
177 we must not forget that, through trade between the tribes, they
have obtained many things from the Mataco, Toba, Choroti, and
Tapiete; otherwise we would have a mistaken conception of the
Ee great difference /249/ between the material culture of the Chaco
tribes named here and the Chiriguano and Chané.

171 If we compare the material culture of the Choroti and Chané
Ee with that of the Choroti and Ashluslay likewise described here,
[285] we must remember the following. The Chiriguano and Chané
produce basket work -- the
c Choroti and Ashluslay never.
Ce. The former know how to paint
[323] clay vessels before firing,
Ee which is unknown to the latter.
[286] The Chiriguano and Chané
c never make bags out of
● [415] →
[531]

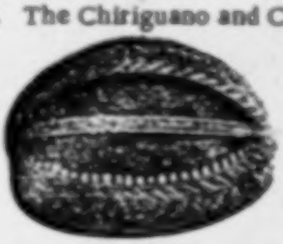

Fig. 126.
Decorated calabash bowl.
Chiriguano. Yacuiba. 1/5.

caraguata, etc. If, moreover, we compare all the products
made by the Chané and Chiriguano with those of the Choroti
c and Ashluslay, we find that most of them are entirely differ-
[177] ent. The Chaco Indians probably learned how to make certain
things, such as the serére (Fig. 120) and huiramimbi pipes (Figs.
36 /omitted in the translation/ and 80), from the Chiriguano,
Ee but this is relatively insignificant.

177 We see here how two cultures can exist side by side for
hundreds of years without mingling.

Ee If we follow the Rio Pilcomayo down toward the mountains,
101 we first come across the Quichua /Quechua/ culture, then come
the Chiriguano and Chané, and after that the Chaquensic /Chaco/
culture which embraces equally the Mataco, Toba, Choroti, and
Ashluslay, as well as the Lengua and other tribes in the Paraguay
Chaco. These three cultures are entirely different.

SF 10
Chane SF8

Ca
539

/263 cont./

"I have so many horses that I do not need any more," said Aguaratunpa.

"I will give you large fields if you grant me my freedom," said the white condor.

"I have so many fields that I do not need any more," said Aguaratunpa.

"I will give you my two daughters as wives and a house in which you can live, if you grant me my freedom," said the white condor.

"I do not need your daughters, for I have wives in all the villages," said Aguaratunpa.

C
●415
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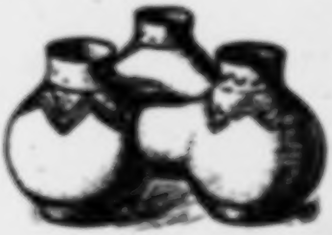

Fig. 127. Clay vessels.
Chiriguano. Caipipendi. 1/3.

Ca
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"I will fill a whole house with silver bowls, 'cagua,' and give it to you, if you grant me my freedom," said the white condor.

/264/ "I have as much silver as I need," said Aguaratunpa, "and I caught you in order to kill you. But if you can make me a present of the white rubber ball, 'toki,' so that I can play with it, I shall give you your freedom," said Aguaratunpa.

Tied to a long silver chain, Urututi flew to fetch the white rubber ball. When Aguaratunpa received it, he gave the white condor his freedom. The ostrich, "Yándu," and the bat, "Andira," played ball. One would throw the ball, catch it with his head, and hit it toward the other one, who in turn caught it with his head and hit it back (cf. p. 45). When the ball was flying through the air, the white condor caught it and disappeared. Aguaratunpa now sent a bird, "Tavatan," to fetch the black rubber ball, and the whole village played. Aguaratunpa played with the ostrich. In the middle

SF10
Chane SF8

Ce
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/279 cont./

"Lie down and sleep!" said the sister of Chiquéritunpa.

The man lay down to sleep with his wife, who was the daughter of Chiquéritunpa. They slept together all day and in the evening she gave birth. The next day Chiquéritunpa came. He wanted to beat his daughter. He sent for a horse, a donkey, and a mare, in order to take his daughter and his son-in-law home. After they had eaten, they rode away.

The man who had been thrashed by the women wept. "Do not weep so much," said the sister of Chiquéritunpa. When they had ridden a short distance, they met a Christian who was working.

"What kind of work are you planning?" asked the man. "I /280/ want to sow mandioca and maize. I want to live here and I want to bring a woman here," said the Christian.

They rode on and met another Christian. "What kind of work are you planning ?" asked the man. In a bad humor, the Christian replied: "I want to sow hills with thorny bushes here."

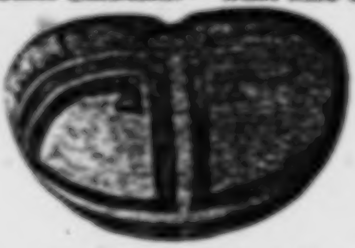

Fig. 128. Calabash bowl. Chiriguano. Itatenbia. 1/4.

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●[415]
[534]

They continued their journey and met another Christian who was busy felling trees. "What kind of work are you planning?" asked the man. "I am chopping down poles for fencing for the animals, for I want to have livestock here. I am bringing everything here, I shall get myself clothing," said the Christian.

They rode on and met another Christian. "What kind of work are you planning?" asked the man. In a bad humor, the Christian answered: "I am working to harvest stones."

They rode on and met another Christian, who was doing carpentry work. "What are you doing here?" they asked. "I want to build myself a house where I shall have clothing and all sorts of other things," answered the Christian.

SF10

Chane SF8

/281 cont./

Ce 539 a house found it already finished and full of clothing. The one who had answered in a bad humor that he wanted to sow chuchio found his field turned into thick brush through which no one could pass.

Chiquěritunpa's son proposed a game to his brother-in-law. "What kind of a game?" he asked. "Let's move the house," /282/ said Chiquěritunpa's son and shifted it with one arm. With all his strength the man moved the house away. "Now let's bring the horse back to life," said Chiquěritunpa's son and lifted up the legs of the horse on which the man had come. It turned into a very fat horse with a mouth that flashed fire. This, too, the man imitated.

The next day the man proposed a game to his brother-in-law, Chiquěritunpa's son. "What shall we play?" he said. "Let's take the sun down," said the man. With a long switch of chuchio he took the sun down. It became so warm that both Chiquěritunpa and his son ran away. The next day the man became chief.

C [2415] [531]

Fig. 129. Clay vessel. Chiriguano. Caipipendi. 1/5.

The one who had been thrashed by the girls whose clothes he had stolen stayed with the sister of Chiquěritunpa. One day she told him he should go to a large lake. There he should dive in and bring up a handful of sand. This sand he should place in the house. He went to the lake, dived in, and brought up a handful of sand which he placed in the house. The next day the sister of Chiquěritunpa said: "Go look at what has become of the sand!" In place of the sand he found a pretty woman. "She shall be your wife," said Chiquěritunpa's sister.

SF10
Chane SF8

C
Ce /301 cont./

648 Thus, the Chiriguano and Chané are on the direct road to [466] being drawn into the anything but fortunate struggle between employer and employee.

The Bolivian government should see to it that the fields of the Indians are entered in the land register, so that whites cannot take possession of them. The government should also make it a condition that no Indian may sell his land. In this

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● 415
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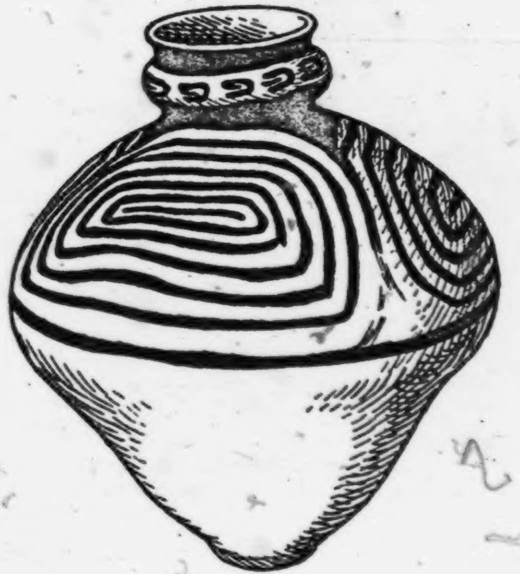

Fig. 133. Clay vessel. - 1/9.
Chiriguano. Caipipendi.

Ce

648 way the government would guarantee the Indians the right of occupation of the land, but not the right of ownership.

C
Ce
648
466
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925 /302/ The uncertainty and the oppressive wage conditions under which these Indians live naturally lead to emigration to Argentina and, above all, to the circumstance that many Indians abandon the land, not only as seasonal workers, but forever.

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Ce
648
273
177 If the Bolivian government wishes to do something for the Indians, it must first of all try to find a remedy for the worst evil, namely, alcoholism. There is a tremendous difference between drinking maize beer and liquor.

352
[114] been imitated from the Europeans. The Chiriguano also sleep in hammocks
[171] made of cotton yarn, and on reed mats and skins spread on the ground.
[513] Stools for sitting on I have not observed among the Chiriguano. They do,
however, possess such articles of furniture,[1] which, however, must be of
353 considerable rarity. Along the walls of the hut will be seen an orderly
●415 array of cooking and roasting pots, water pitchers, and pots for maize
[531] beer, arranged in rows, often of exceedingly beautiful shape and with painted decoration (figs. 217—225). From wooden hooks in the roof are hanging bunches of maize cobs, pumpkins or other foodstuffs; arrows, bows, and other gear. From the roof there are also suspended clay bowls (figs. 224 and 225), used as repositories for smaller articles of value. Clothing, ornaments, and such like, are also stored in large clay jars placed on the ground. As bowls there are also used the scaly skin of armadillos, and calabashes (fig. 226).

[352] →
[291]
[302]
[411]
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[237]
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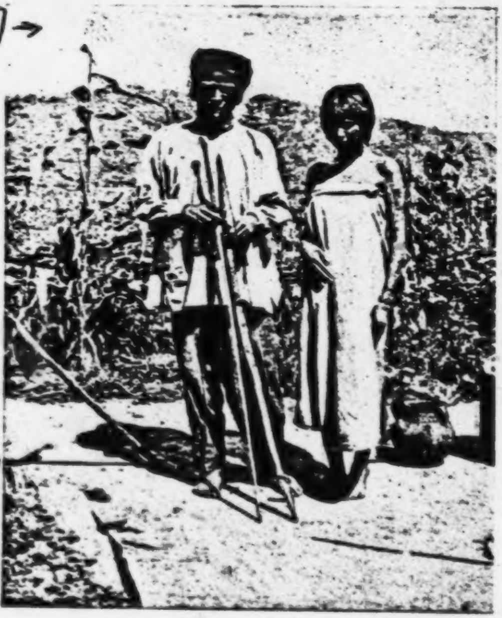

Fig. 194. Man and young woman. Chiriguano. San Luis. Bolivia. Photo. E. v. R.

354
→ Outside every hut there is, as I mentioned, a fireplace which is generally used for cooking the food, unless the weather makes this im-
356 possible. The huts, as well as the open spaces between them, are kept particularly neat and clean. They are swept every day, and the sweepings are burnt. The huts are practically always free from vermin.

291 The Chiriguano men nowadays generally wear shirt and trousers of
[177] European cut (fig. 194). The poncho shirt is, however, still to be met with among this tribe[2], but only very rarely, and I have never personally

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[1] Nordenskiöld (13), p. 163 and fig. 85 (12), pp. 15 and 16, and fig. 3.

[2] Nordenskiöld (12), p. 59.

[P. 216 is blank]

323 counterparts of which are found on many ancient Peruvian clay vessels, have been more fully described by me in »En förgången värld».[1] The cord by which this vessel was suspended passed round the edge, and then upwards, between the points of the rim warts. At each wart a hole has been pierced through the rim of the vessel, but these perforations are so very small that they cannot very well have been used for fixing any string by which to hang up the vessel.

Besides the clay pots here reproduced — often graceful of shape and beautifully painted — there are also plain, unpainted clay vessels for cooking and other kitchen purposes. Chiriguano ceramics are of an exceedingly great variety as to form, and many of the shapes are identical with those of clay vessels found in ancient Indian graves and in the ground of ancient dwelling-sites in those regions of the Andes that border on the present Chiriguano country.

824 Next to clay vessels, bottles and bowls made of calabash may be said
● 415 to predominate among the household furniture of the Chiriguano. The bowls are often provided with pokerwork ornament (fig. 226).

273 On festivals — and also usually, though not always — the Chiriguano drink an intoxicating liquor (»chicha», in Chiriguano: »cangui»), which they prepare from maize. In
[415] huge wooden mortars the maize is
[531] pounded to flour, which is poured into large clay vessels filled with
→ water. This mixture is made to boil, and when it has cooled down, lumps of chewed maize dough are put into it to produce fermentation. These masticated mouthfuls of maize are usually allowed to dry in the sun, before use, and are then frequently spread on a
[114] bedstead (fig. 190). This method of preparing maize beer naturally

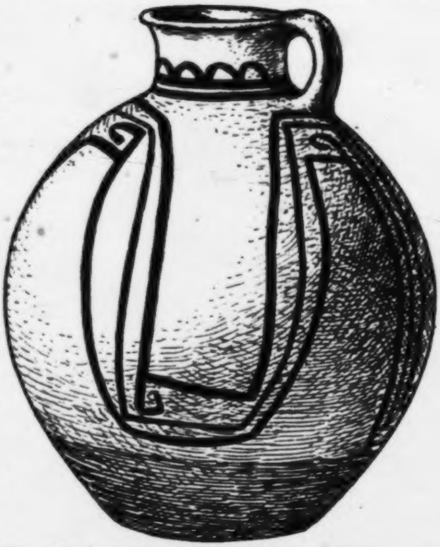

Fig. 218. A jug for holding maize beer. Earthenware. Bottom part and inside unpainted. The rest painted brownish yellow, with ornaments in dark brown (marked in black) and red (marked in thin lines). Chiriguano. Aguayrenda. Bolivia. $^{3}/_{8}$. Riksm. 03. 3. 837.

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[1] von Rosen (1), p. 344 et seq.

273
[114] strikes one as particularly disgusting, and therefore, after I had got to know how the brew was made, I could never again bring myself to drink this beverage, which in itself is rather palatable. As I have already mentioned, an intoxicating liquor is also made from the fruit of the algar-
276 robo tree. The beer made by the Chiriguano is very highly prized by them. But, on the other hand, it does not appear that tobacco is used

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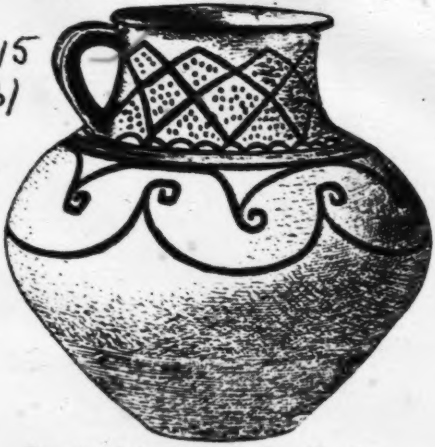

Fig. 219. A jug for maize beer. 1/4. Riksm. 03. 3. 803.

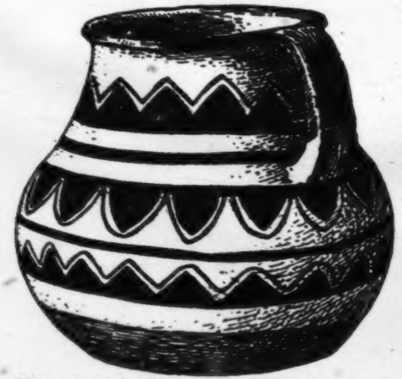

Fig. 220. A maize beer decanter. 2/5. Riksm. 03. 3. 835.

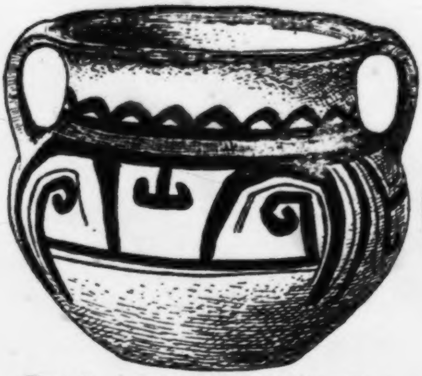

Fig. 221. A maize beer bowl. 1/5. Riksm. 03. 3. 839.

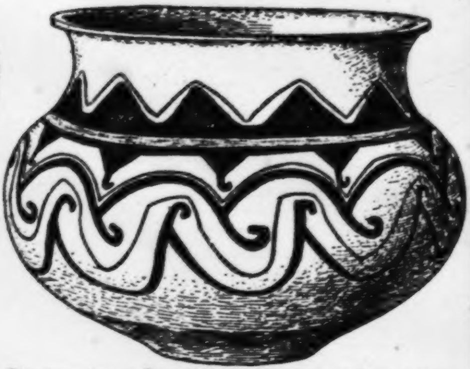

Fig. 222. A maize beer bowl with four holes through the rim, in which strings can be fixed. 1/4. Riksm. (No catalogue number.)

Painted earthenware vessels. The ground-colour of the vessels in figs. 219 and 220 is yellowish-white; of those in figs. 221 and 222, a brownish-yellow. The ornamentation is in dark brown (here marked quite black) and red (marked with fine lines). The inner sides and bottoms of the vessels are unpainted. Chiriguano. Aguayrenda. Bolivia.

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←

by them to any considerable extent; I myself never saw any Chiriguano smoking.

The Chiriguano are very fond of music and dancing. Their musical instruments consist of a kind of primitive trumpets of cow-horn, reed flutes, whistles and drums.

An interesting Chiriguano whistling pipe is here reproduced, in fig. 227. It consists of a flat piece of some hard and heavy wood; is 18.5 cm long, 3.6 cm wide, and has a section as set out in the figure. It has, pierced through its longitudinal axis, a tubular perforation, 7 to 9 mm in diameter, and open at both ends, running from end to end of the instrument. In the centre of its upper edge there are two, somewhat smaller, holes through which is threaded the string which allows of the pipe being worn round the neck as a breast ornament. The carrying cord running through two holes, side by side, probably indicates that the pipe was meant to hang horizontally on the breast. If there had been only one hole for the cord, the pipe would have tilted one way or the other, like the beam of a pair of scales. The pipe is designed for blowing on in the

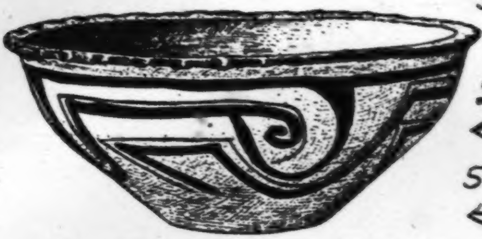

Fig. 223. Food bowl of earthenware. Inside and bottom unpainted. The rest of it painted yellowish white, with ornaments painted in dark brown (marked black) and red (represented by thin lines). Chiriguano. Aguayrenda. Bolivia. 1/4. Riksm. 03. 3. 846.

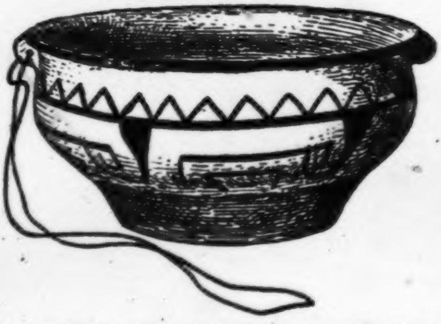

Fig. 224. Hanging bowl, for keeping small articles. Earthenware. Inside and bottom unpainted. The rest painted yellowish white, with ornaments in dark brown. Chiriguano. Aguayrenda. Bolivia. 2/5. Riksm. 03. 3. 843.

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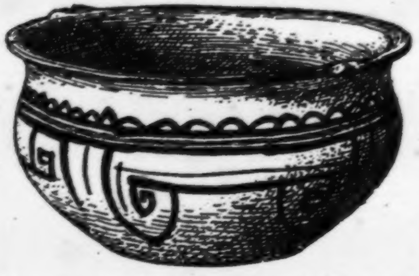

Fig. 225. Hanging bowl, for keeping small articles. Earthenware. Inside and bottom unpainted. Otherwise painted yellowish white, with ornaments in dark brown (marked black) and red (represented by thin lines). Chiriguano. Aguayrenda. Bolivia. 3/5. Riksm. 03. 3. 844.

534 same way as Pan pipes; and *naturally gives out tones, when one end of the tube is closed, different to those producible with both ends open.* The pipe is open at both ends, therefore, not only because this allows the instrument to be easily cleaned from dust, dirt and saliva, but also because *this construction gives the possibility of a greater number of tones.*

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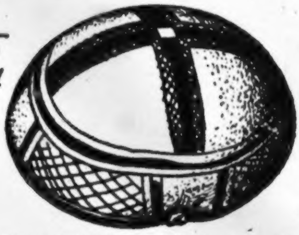

Fig. 226. Bowl, of calabash, up-turned, with pokerwork ornaments. Chiriguano. Carapari. Bolivia. 1/2. Riksm. 03. 3. 831.

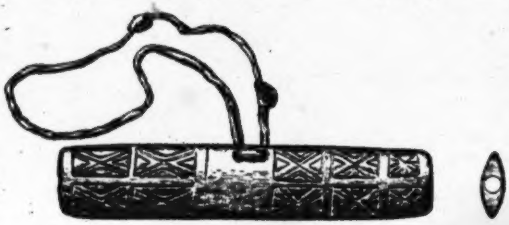

Fig. 227. Whistle, made of hard, black wood. Incised ornaments. Two cracks near one end of the tube have been filled up with a waxy substance. Chiriguano. Aguayrenda. Bolivia. 1/2. Riksm. 03. 3. 848.

534
171 That the Indians occasionally also give a thought to keeping dust, etc., from getting into their whistling pipes, is, besides, evident from the pipe shown in fig. 228, which is an Araucan whistle from Cautin, Chile, a tubular piece of wood, 27.5 cm long. A common brass thimble is fitted over the lower end of the pipe, and for its top end there is a small, well made stopper of woollen-yarn, connected to the pipe with a string, so as not to get lost when taken out for the whistle to be blown. Concerning this stopper, Eric Boman, who has reproduced the pipe in one of his works, writes as follows: ›Este tapón sirve para cerrar la boca del silbato, cuando éste no se usa, e impedir que entren allí tierra y otras impurenzas.›[1] ›This stopper serves to keep the mouth of the whistle closed when the latter is not being used, and prevents dust and other dirt from entering.›

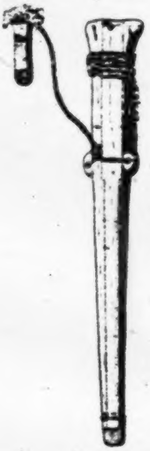

Fig. 228. Whistle, found at Cautin. Chile. From Boman.

Objects of tubular form, in construction corresponding to the one here reproduced in fig. 227, have been found in ancient Peruvian graves, and not only the Chiriguano, but also many other tribes now inhabiting areas in the neighbourhood of what once was the Inca domain, are still

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[1] Boman (3), p. 518.

Plate VII

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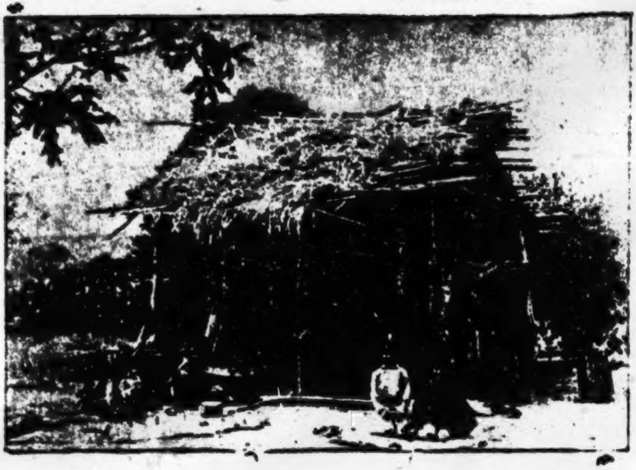

Fig. 16

(I.C. 357) -- Chiriguano storehouse built on posts in Machareti

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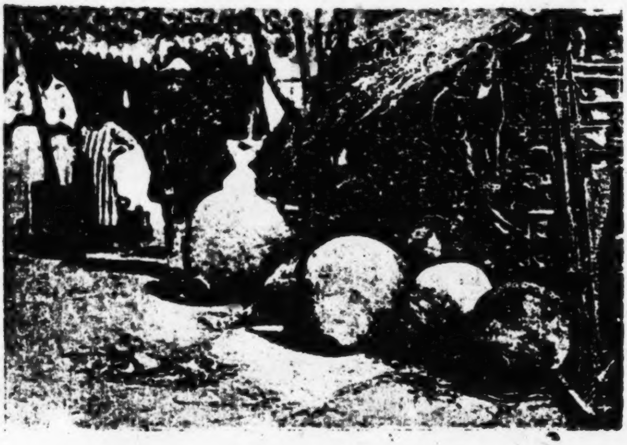

Fig. 17

(I.C. 355) -- Scene in the Chiriguano town of Machareti. Boy dressed in a poncho. Large baked clay vessels and a mortar.

C /19 cont./
263 317 439 from the whites (82).

82. Nord. 1, p. 189. Métraux I, pp. 359 and 360.

C 273 [312] Among beverages, besides water, which is scarce in certain regions, chicha (ka'ui) made of maize, potatoes, or algarrobo deserves mention (83). Chicha made from yellow

83. Nord. 1, pp. 234 and 236. Métraux I, pp. 364 and 365.

Ce [273] or white maize is preferred. The chicha from potatoes by the Chané of the Parapití River is considered inferior.

C Ce 264 ●415 The Chiriguano and Chané ordinarily do not eat from a common pot, but separately and from dishes. Because of this their houses contain many dishes, which are normally made of baked clay (nyá'e), but may also be of wood (sua) (84).

84. Cf. Nord. 1, p. 190.

C Ce 415 [126] I collected various baked clay dishes among the Chiriguano and Chané (cf. Figs. 78-80 /see p.143/), as well as two wooden dishes, two examples of which the Museum already had, donated by Doña María F. de Casati. I shall deal with the baked clay dishes, along with the other baked clay vessels, in the chapter on pottery, and therefore enumerate here only the wooden plates in the collection.

C 415

Wooden Dishes (sua) of the Chiriguano

I. A. 351.	(Gift of Doña María F. de Casati.)	Diam. 21 cm.	Ht. 6 cm.	
I. A. 352.	(")	" 15.5 cm.	" 3.5 cm.	
I. A. 496.	(Max Schmidt trip.)	Diam. 23 cm.	Ht. 6 cm.	(Fig. 18).
I. A. 497.	(" " ")	" 30 cm.	" 6.5 cm.	(Fig. 18a).

Chané SF8

/19 cont./

C
415 As Figure 18, a and b, shows, these wooden dishes have two handles on the rim.

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Ce
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[177]
[439] As an eating utensil the Chiriguano and Chané today use metal spoons which are acquired from the whites. But they also use wooden spoons (85).

C
Ce
[113] 85. Nord. 2, p. 56. Nordenskiöld, Erland: Vergleichende ethnographische Forschungen I. Eine Geographische und ethnographische Analyse der materiellen Kultur zweier Indianerstämme in el Gran Chaco /Comparative Ethnographic Investigation I. A Geographic and Ethnographic Analysis of the Material Culture of Two Indian Tribes in the Gran Chaco/, Göteborg, 1918, p. 93. (Cited in what follows: Nord. 3.) Métraux I, pp. 364, 374-376, and Figs. 42 and 43.

C
412 /20/ Wooden Spoons (kuruha) of the Chiriguano

I. A. 353. (Gift of Doña María F. de Casati.) Length 36 cm.
I. A. 498. (Max Schmidt trip.) Length 42.5 cm. (Fig. 20).
I. A. 499. (" " ") Length 16 cm. (Fig. 22).

C
[171] As Figures 20 and 22 show, there are variations in the shape of these wooden spoons. The shape of spoon I. A. 499 is almost exactly like the Chané spoon shown in a drawing by Nordenskiöld (86), while the shape of spoon I. A. 498 is very

86. Nord. 3, p. 93. Fig. 24 F.

similar to the spoons found in the ancient burials of the Peruvian highland, their front part and handle forming a rather straight line.

/20 cont./

C
Ce
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17

Although it may be that the shape of the wooden spoons of the Chiriguano and of the Chané may have been influenced in many cases by the shape of the metal spoons acquired from the whites, we must nonetheless regard it as a product of the indigenous culture of South America that in pre-Columbian times had been rather widespread generally among the Andean cultures. Its appearance is quite limited among the native tribes of South America, setting aside the cases where it has been imported by the whites. But it is quite common among the Indians of the regions near Chiriguano territory in particular, for example, among the Tapieté and many other Chaco tribes, such as the Toba, Matako, Churupí, and especially also among the Mojo and, farther to the east, among the Guató. It must be supposed that the Chiriguano received this cultural possession directly or indirectly from the culture of the Andean montaña.

Ce
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Shells (ínta) as Eating Utensils

I. A. 734 and 735. (Izozó.) Length 12 cm. and 10 cm.

Outside of the spoons mentioned, the Chané-Izozó also use shells as eating utensils.

Ce
415
[824]

As vessels for drinking water and chicha, they above all use cuyas /vessels made from gourds/ (cf. Figures 24-26 and 149; 150; 153) and calabashes (cf. Figures 42 and 151). For the chicha festivities this beverage is ordinarily taken out of the painted baked clay pots in cuyas with designs on them, which are passed around among those present. Of the cuyas that I acquired from the Chiriguano in Machareti many have either incised or pyrographed designs, with which I shall deal in the chapter on art. The cuyas received from the Izozó do not have designs on them, which is easily explained by the peculiar circumstance that the Izozó were at that time living near Toledo. Three of the calabashes received from the Izozó (cf. Figure 42 c) were made from the fruit of the

● C
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Ce
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[531]
[824]

Ce /20 cont./

415 Crescentia Cuyete /Crescentia cujete/ tree, which does not [824] grow in their territory. The cacique of the Izozó told me [439] that these fruits had been brought from Santa Cruz de la Sierra.

C Ce ●415 In addition to these cuyas, the Chiriguano and Izozó also use for drinking chicha small baked clay chicha vessels with handles in the form of European cups. /Plates VIII-IX appear here./

C 415 126 531

/21/ Cuyas (ia) in the Collection

I. A. 451.	Chiriguano	Length 14 cm.	Incised designs.	(Fig.26e.)
I. A. 452.	"	" 10 cm.	" "	(Fig. 26a.)
I. A. 453.	"	" 10 cm.	" "	
I. A. 454.	"	" 5.7 cm.	" "	(Fig. 26c.)
I. A. 455.	"	" 12.5 cm.	Designs incised and pyrographed.	
I. A. 456.	"	" 11.5 cm.	" "	(Fig. 26b.)
I. A. 457.	"	" 23 cm.	" "	(Fig. 24.)
I. A. 458.	"	" 15 cm.	" "	(Fig. 26d.)
I. A. 459.	"	" 13.5 cm.	No designs, red paint outside.	
I. A. 460.	"	" 20 cm.	Incised and pyrographed designs.	(Fig. 25b.)

Ce [415]

I. A. 461-463; 490; 537-539. Chiriguano. No designs.

I. A. 666	Izozó	Length 19.5 cm.	No designs, with handle.	(Fig. 25a.)
I. A. 667-670.	"		No designs.	

The length of these cuyas is quite variable. The largest of them measures 23 cm. in length and the smallest only 5.5 cm.

Calabashes (iá, ua) in the Collection

I. A. 464-467.	Chiriguano	With pyrographed designs. (I. A. 466: Fig. 151.)
I. A. 458.	"	No designs; with a maize cob for stopper.
I. A. 469.	"	No designs; entwined all around.
I. A. 661 and 662.	Izozó	No designs. (Fig. 42 a and b.)
I. A. 663-665.	"	No designs; made from the fruit of the Crescentia Cuyete tree. (I. A. 665: Fig. 42.)

Ce 415 126 [531]

●415

Plate VIII

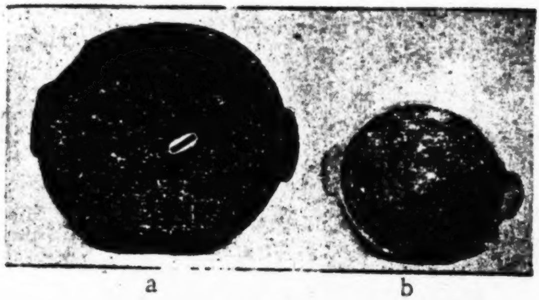

Fig. 18

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Fig. 19

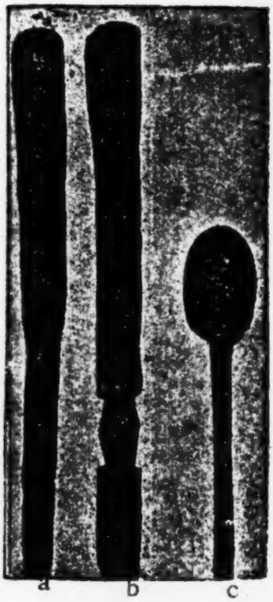

Fig. 20

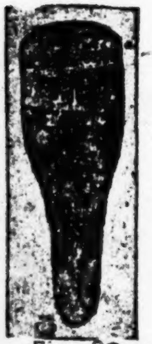

Fig. 21

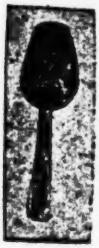

Fig. 22

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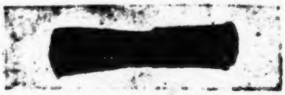

Fig. 23

/The captions are on p. 52./

Chane SF8
Izozo

Plate IX

C
●415
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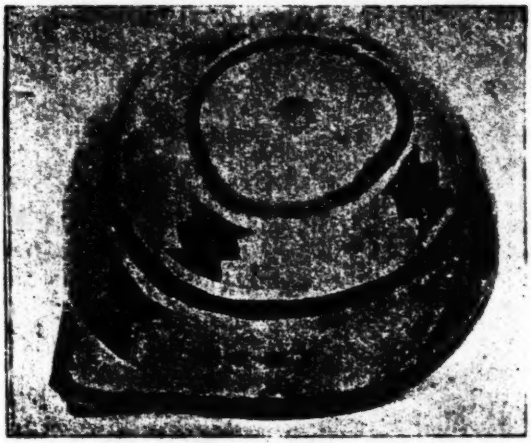

Fig. 24

C
Ce
415

Fig. 25

C
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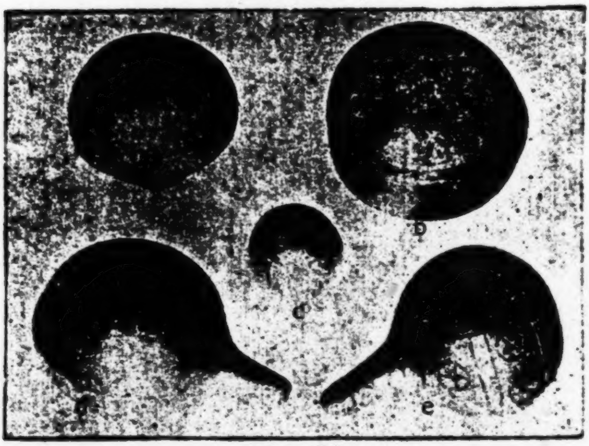

Fig. 26

/The captions are on p. 52./

Chane SF8
Izozo

/Captions for Plates VIII and IX./

Plate VIII

C 415 Fig. 18. a (I. A. 497): wooden dish (Chiriguano), diam. 30 cm.
b (I. A. 496): wooden dish (Chiriguano), diam 23 cm.

Fig. 19. (I. A. 574.) Wooden platter (Chiriguano), length 83 cm.

C 412 Fig. 20. a (I. A. 578), b (I. A. 576): wooden spatulas for stirring foods and drinks (Chiriguano), length 66.5 cm. and 114 cm.
c (I. A. 498): wooden spoon (Chiriguano), length 42.5 cm.

Fig. 21. (I. A. 502.) Spatula for stirring foods and drinks (Chiriguano), length 24.5 cm.

C Fig. 22. (I. A. 499.) Wooden spoon (Chiriguano), length 16 cm.

276 Fig. 23. (I. A. 511.) Wooden pipe (Chiriguano), length 10.5 cm.

Plate IX

C 415 Fig. 24. (I. A. 457.) Decorated cuya (Chiriguano), length 23 cm.

Ce [415] Fig. 25. a (I. A. 666): cuya with sewing (Izozó), length 19.5 cm.
b (I. A. 460): decorated cuya (Chiriguano), length 20 cm.

Fig. 26. Decorated cuyas (Chiriguano): a (I. A. 452), length 10 cm.; b (I. A. 456), length 11.5 cm.; c (I. A. 454), length 5.7 cm.; d (I. A. 458), length 15 cm.; e (I. A. 451), length 14 cm.

C
Ce
415
/21 cont./

The largest of these calabashes measures 50 cm. and the smallest 7.5 cm.

Stimulants

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[126]

The Izozó whom I found in Toledo were not smokers. They attached no importance to the tobacco and pipes that I offered them. I acquired from the Chiriguano a simple wooden pipe, straight in shape, of the kind commonly used among the tribes of the Chaco, but I have seen no other pipes among them; neither have I seen them smoking.

C
[126]

Pipe (cachimbo) in the Collection

I. A. 740. Chiriguano. Length 10.5 cm. (Fig. 23.)

C
Ce
249
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C
276

According to Nordenskiöld, the Chiriguano and the Chané plant tobacco, but its planting is not significant and they are not great smokers. If they smoke, they ordinarily use cigarettes, with a wrapper made out of a maize leaf, and only rarely use pipes (87). This explains the very uncharacteristic form of the pipe that I found among the Chiriguano. A pipe of very different shape, with a special handle in front of the tobacco bowl, is represented in a drawing by Nordenskiöld (88). According to the same author, the Chiriguano who live near the Quichua have received from the latter the custom of chewing coca.

C
[177]

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87. Nord. I, p. 182. Cf. Métraux I, p. 339.

88. Nord. I, p. 179. Fig. 88.

C
Ce /34 cont./
756 most other Indians of South America, there is a professional
171 physician who is charged with the treatment of the sick, this
treatment in most cases consisting of sorcery among these
C Indians too. The physician attempts to dispel the evil by
Ce sucking out foreign objects which have penetrated the body of
755 the bewitched sick person. In addition to such treatment,
757 remedies are used among the Chiriguano and Chané, which,
[824] in addition to those made of plant substances, include the
[237] fat of various animals applied externally for different illnesses.
Ce The Chané treat wounds with boiling water.
752

C Burial among the Chiriguano and Chané who live outside
Ce the missions is generally still done in urns, according to
764 primordial custom. According to Nordenskiöld (149), the
●415 large pots in which chicha is prepared are also used as funeral
urns, and another pot is used to close the urn. Often the dying
person, even before being completely dead, or soon after
death, is crammed into the urn in a squatting position. A
C calabash of water is placed with the dead person in the urn,
Ee which is buried within the house. Commonly the house, after
768 the burial, is abandoned for some time, but is occupied again
C later. Such a funeral urn of the Chiriguano of the Caipipendi
764 Valley is shown in a drawing by Erland Nordenskiöld (150).
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Up to half of the urn, which is provided with a cover, is disenterred. Nordenskiöld's statement that the Chiriguano use the same pots which serve for the preparation of meals as funeral urns is significant. From that we can deduce that a funeral urn found in other regions might also have served, during the lifetime of the dead person buried in it, some other purpose related to the economy of those Indians.

149. Nord. 1, p. 208.

150. Nord. 1, Fig. 113.

C Ce /37 cont./

524 177 These Indians received two games of chance from the whites, the game of dice, which they call by the Spanish name "daro," and the game with a cow's leg bone, which they call "taba."

Agriculture

C Ce 241 I have already explained in the chapter on food and drink that the cultivation of maize as an agricultural product is common, and among the Chané of the Parapití the cultivation of the sweet potato. Mandioca is only cultivated rarely and has no importance in the economy of these Indians. Various species of beans are planted, also one species of cactus, some gourds which have edible fruits, and also a little tobacco.
C Ce 241 177 In addition to these edible or stimulating native plants that are cultivated, there are some others received from the whites, but these have little importance in the economy of these Indians. According to Nordenskiöld (171), they are the following: sugar cane, peanuts, watermelon, muskmelon, figs, oranges and millet, and Métraux also mentions the pepper among them (172).

C Ce 241 ● [415] [283] [386] In addition to these edible or stimulating plants, there are cultivated various species of gourds whose fruits are not edible but are used to make containers, cotton for making thread, urucú for obtaining red dye, and, among the Indians of the Parapití, also a species of cane, Harundo Donax /Arundo donax/, which grows wild in great quantity on the banks of the Pilcomayo, but not on those of the Parapití River.

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171. Nord. 2, pp. 23 and 24.

172. Métraux 1, pp. 338 and 339.

C 317 263 /45 cont./
the earth of the salt licks called "yukiu" (214).

214. Nord., 1, p. 189. See Métraux 1, pp. 359 and 360.

Making Fire

C Ce 372 Native implements to make fire are little used today by the Chiriguano and Chané. At home fire can generally be obtained from some other piece of burning wood, and for other occasions they commonly provide themselves with modern matches. Moreover, as I have said, the Chiriguano and Chané are not great smokers. One fire-making tool which is still found among them is the strike-a-light. The specimen I acquired from the Chiriguano is different from the strike-a-light of the Chaco tribes in that the tinder consists of a quite thick cotton wick. According to Métraux (215), there is also found among them the common form of strike-a-light in which the tinder consists of the fuzz of the fruit of the palo borracho (Chorisia insignis) kept in a container made of a a cow horn or armadillo tail.

C Ce [178] [276]

C Ce [415] [237]

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215. Métraux 1, p. 253.

Fire-making Implements in the Collection

C Ce 372 126

I. A. 516. (Fig. 40.)

a. Bag woven of cotton thread as a container for the implements.

b. Wick of cotton thread.

c. Receptacle for the lighted end of the wick, made of the nest of a species of wasp.

d. Piece of a modern metal file.

e. Pieces of flint.

Chane SF8
Izozo

C
Ce /45 cont./
372 A small nest of a species of wasp serves as a container
[415] for the lighted end of the wick. The fire is produced by
[239] striking a flint with a piece of a modern metal file.

Ce In a Chané legend recorded by Nordenskiöld (216), it
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216. Nord. 1. p. 252.

turns out that the Chané formerly produced fire by rubbing one little stick upon another. According to this legend, two boys and a girl received fire from an old man, who is the sun. The bird Huapi advised them to take good care of the fire. Should it once go out, they would have to make new fire with the "tata," which is the /46/ implement for making fire by
Ce rubbing two sticks together. The cacique of the Izozó, when
372 I asked him about this implement, also knew it well and called it by its name in Guaraní. Nordenskiöld once saw a
C
372 Chiriguano who had no matches with him make a fire with such an implement (217).

217. Nord. 1. p. 50. Cf. Métraux 1. p. 354.

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Ceramics

415 The great development of ceramics among the Chiriguano
114 and Chané, the very great variety of forms of their diverse vessels and their ornamentation have long excited the interest of ethnologists. Nordenskiöld, who gives the number of variations in the forms of the vessels of these Indians as more than 50, has published a great many of them in outline and also presents the ornamentation of many of them in sketches (218). Eric v. Rosen has also shown numerous

218. Nord. 1., Figs. 77; 78; 82; 97; 112; 117; 121, and Plate 19. Nord. 2, Figs. 38-48.

Chane SF8
Izozo

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/46 cont./ Eric v. Rosen has also shown numerous Chiriguano vessels in drawings in his work already cited (219).

219. V. Rosen. Figs. 210-225.

Métraux describes and shows by drawings a great number of Chiriguano baked clay vessels (220).

220. Métraux 1, pp. 370-374; pp. 382-426; Plates 16-19 and 24-60.

A publication by Felix F. Outes deals particularly with Chiriguano ceramics (221).

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[113]

221. Felix F. Outes: La ceramica Chiriguana /Chiriguano Ceramics/." From the Revista del Museo de la Plata. Vol. XVI (second series. Vol. III). Buenos Aires, 1909, pp. 121-136.

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Because formerly in the museum of the Sociedad Cientifica del Paraguay we had only four baked clay vessels and a piece of a handle from the Chiriguano, which Doña Maria F. de Casati collected among them and presented to the museum, I had a special interest in filling this gap. With some effort I managed to acquire from the Izozó in Toledo 41 Chiriguano vessels, and from the Chiriguano in Machareti, 55 of them, and with rather more effort I managed to bring them back whole and with their designs in good condition through the long trip to Asunción.

These baked clay vessels collected by me also show great variation in their form and ornamentation. But these diverse variations can be reduced to several groups, according to the purpose for which they were intended.

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The Chiriguano and Chané baked clay vessels may serve very different ends:

1. To cook foods and liquids.
2. To fry /fritar, literally "to frit"/ foods.
3. To steam maize meal.
4. To carry and keep water.

/46 cont./

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5. As a container for chicha.
6. To serve chicha.
7. As a drinking container, especially for drinking chicha.
8. To store food.
9. To store anything at all.
10. As plates for eating meals.
11. As a base for the spindle in spinning.
12. As funerary urns.

/47/

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1. Baked Clay Vessels for Cooking Foods and Liquids (yapèpo), from the Collection

I. A. 412	Chirig.	Ht.	12 cm.	Max. Dia.	14 cm.	Aperture	12 cm.
						"	(Fig. 48)
I. A. 413	"	"	28 cm.	"	" 23.5 cm.		18 cm.
							(Fig. 46)
I. A. 414	"	"	24 cm.	"	" 23 cm.	"	17 cm.
							(Fig. 44)
I. A. 415	"	"	20 cm.	"	" 19.5 cm.	"	14.5 cm.
I. A. 416	"	"	30 cm.	"	" 26 cm.	"	20 cm.
I. A. 417	"	"	22 cm.	"	" 22.5 cm.	"	19 cm.
I. A. 418	"	"	23.5 cm.	"	" 26 cm.	"	20 cm.
							(Fig. 45)
I. A. 419	"	"	22 cm.	"	" 20 cm.	"	16 cm.
							(Fig. 47)
I. A. 420	"	"	28.5 cm.	"	" 28 cm.	"	20 cm.
I. A. 421	"	"	20 cm.	"	" 22.5 cm.	"	19 cm.

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The form of these ten Chiriguano vessels intended for cooking foods or liquids is essentially the same. Only the vessel I. A. 412, with a height of 12 cm., is substantially smaller than the other vessels, whose height varies between 20 and 30 cm. Only in the case of the former small vessel is the diameter of the aperture at the top equal to the height of the vessel, while for all the other vessels the diameter of the aperture at the top is less than the height, and in some cases this is a difference of up to 10 centimeters.

/47 cont./

080 C 415 531 difference of up to 10 centimeters. The neck is clearly distinguished from the globular belly of these vessels by a border on all of these vessels provided with sunken ornamentation. Also the flat part of the bottom is clearly distinguished from the wall by a border. The surface of the belly of the vessels has incised lines produced by rubbing the surface, when still moist, with a maize cob. Only the little vessel I. A. 412 has its entire surface covered with sunken ornamentation.

C 415 All of these vessels intended for cooking are fitted with two handles in a vertical position, attached to the upper rim of the pot and coming down to the lower part of the neck. The form of these handles shows some variation which I shall deal with in the chapter on art.

Vessel Intended f[illegible] Cooking Maize Meal for the Preparation of Chicha, from the Collection

C [126] I. A. 399 (Chirig.) Ht. 52cm. Max. dia. 42cm. Aperture 24 cm. (Fig. 50).

Large baked clay vessels, which in many cases are still much larger than the specimen brought back by me from the Chiriguano, are used for cooking the maize meal used in the preparation of chicha. As shown in Fig. 50, this kind of vessel is different from the ordinary vessels intended for cooking only by not having handles. The wall of the belly is clearly C [531] distinguished from the neck and from the flat bottom. The neck of these vessels also has sunken ornamentation. The vessel shown in Figure 50 is relatively high in comparison with its maximum diameter and with the diameter of the Ce [415] aperture at the top. The vessels for cooking chicha native to the Chané on the Itiyuru and shown in drawings by Nordenskiöld have, in comparison with their maximum diameter and the diameter of their aperture, a much smaller aperture /sic/, (222).

222. Nord. 1, Fig. 83.

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2. Vessels Intended for Frying Maize, from the Collection

I. A. 400 (Chirig.). Ht. 14 cm. Max. dia. 33 cm. (Fig. 53a).
I. A. 592 (Izozó). " 10 cm. " " 21.5 cm.

These two vessels are very similar to each other. Both have two small handles on the rim. They differ from one another only in that the division between the flat base and the wall of the Izozó pot is more marked than on the Chiriguano vessel. A vessel very similar to the two described above and from the Chané on the Itiyuru River is shown in a drawing by Erland Nordenskiöld (223). Because Nordenskiöld states that this vessel was intended for frying /fritar/ maize, I also consider the two similar vessels in the collection to have been used for that end.

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3. Vessel for Steaming Maize Meal, from the Collection

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[126]

I. A. 422 (Chiriguano). Height 12.5 cm. Max. dia. 23 cm. (Fig. 52.)

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This vessel has some round holes in the bottom, one of which is in the center and the rest in two concentric circles around the central one. According to Nordenskiöld (224), who shows in a drawing a vessel very similar to this one, these plates with holes in the bottom are used for steaming the maize meal with which they prepare a dish that they call in Chiriguano "huintimimimo." To do this, they put the plate with the maize meal on the aperture at the top of a pot in which they boil water (225).

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223. Nord. 2, p. 53 and Fig. 43, N. 23.

224. Nord. 2, Fig. 43, N. 22.

225. See Métraux I, p. 357 and (Plate 13) N. 1 and 2.

Chane SF8
Izozo

/48 cont./

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4. Vessels for Carrying or Storing Water, from the Collection

I. A. 392	Chirig.	Ht.	25 cm.	Max. Dia.	17.7 cm.	Apert.	4 cm.
							(Fig. 84)
I. A. 393	"	"	32 cm.	" "	29.5 cm.	"	9 cm.
I. A. 395	"	"	32 cm.	" "	31.5 cm.	"	13.5 cm.
I. A. 396	"	"	32 cm.	" "	30 cm.	"	14.5 cm.
							(Fig. 55)
I. A. 589	Izozó	"	34 cm.	" "	23.7 cm.	"	6.5 cm.
I. A. 606	"	"	24.5 cm.	" "	18.5 cm.	"	3.5 cm.
							(Fig. 56a)
I. A. 607	"	"	13.5 cm.	" "	14.5 cm.	"	13 cm.
I. A. 608	"	"	19.5 cm.	" "	19.2 cm.	"	3.5 cm.
							(Fig. 83b)
I. A. 617	"	"	16 cm.	" "	17 cm.	"	11.5 cm.
							(Fig. 56b)
I. A. 621	"	"	28.5 cm.	" "	18.4 cm.	"	3.5 cm.
							(Fig. 83a)
I. A. 761	"	"	40.5 cm.	" "	27.5 cm.	"	7 cm.
							(Fig. 54)
I. A. 762	"	"	44 cm.	" "	34.5 cm.	"	7.9 cm.
I. A. 763	"	"	48 cm.	" "	35 cm.	"	7.7 cm.

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The vessels mentioned in the above, in contrast with the cooking pots, have a smooth surface. Also they are not painted. This leads us to assume that they are intended for common use rather than for festive occasions, and we must consider them primarily as vessels for water, which naturally does not preclude their being used on occasion for chicha. Plates XIV-XVII appear here.

Plate XIV

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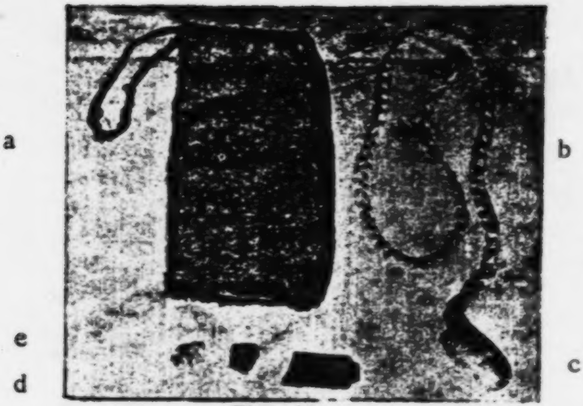

Fig. 40

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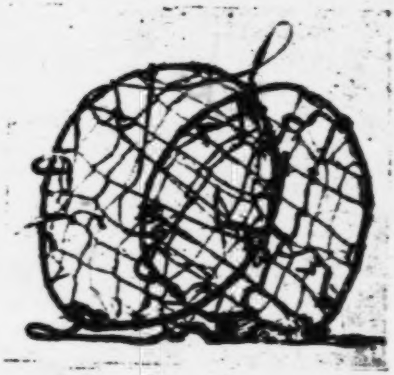

Fig. 41

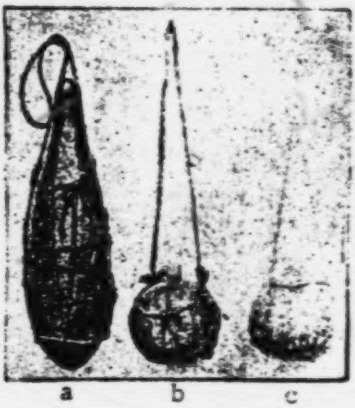

Fig. 42

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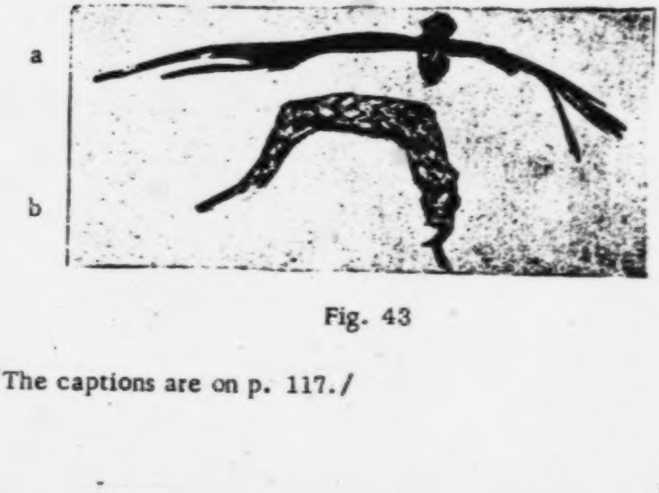

Fig. 43

/The captions are on p. 117./

Plate XV

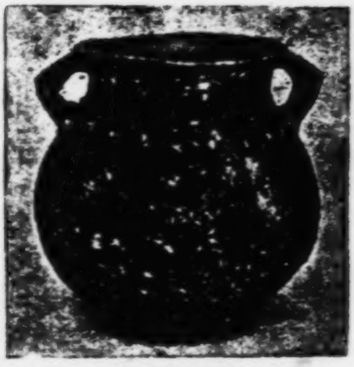

Fig. 44

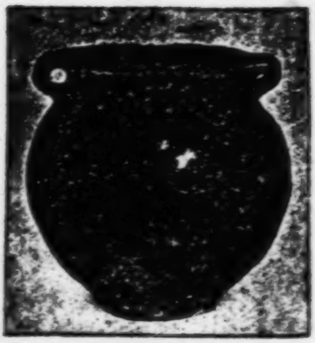

Fig. 46

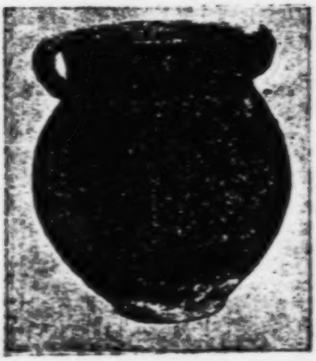

Fig. 45

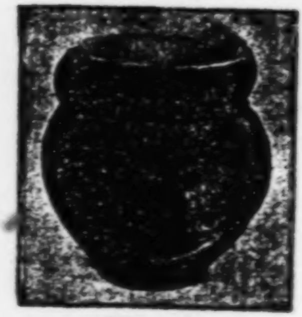

Fig. 48

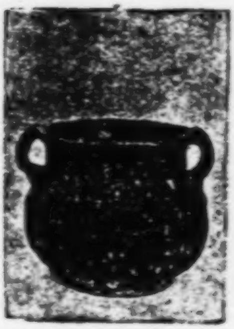

Fig. 47

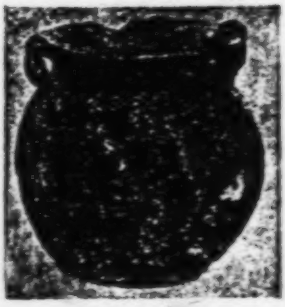

Fig. 49

/The captions are on p. 117./

Chane SF8
Izozo

/Captions for Plates XIV and XV./

C
372
● 415 Fig. 40. (I. A. 516) Implements for making fire (Chiriguano):
a (I. A. 516a), bag as receptacle for the implements, length 16 cm., width 8.5 cm.;
C
[237] b (I. A. 516b), cotton wick, length 62 cm.;
c (I. A. 516c), receptacle for the end of the wick, nest of a species of wasp, length 4.2 cm.;
d (I. A. 516d), piece of a metal file, length 4 cm.
e, flints.

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285 Fig. 41. (I. A. 583) A pair of hoops for storing goods (Chiriguano), diameter 43 cm.

Ce
415 Fig. 42. Calabashes for carrying water (Izozó):
a (I. A. 661), height 49.5 cm.;
b (I. A. 662), height 16 cm.;
Ce
[824] c (I. A. 665), height 17.5 cm., made out of the fruit of the tree Crescentia Cuyeta /Crescentia cujete/.

C
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796 Fig. 43. Objects plaited out of palm leaves, used in religious festivities (Chiriguano):
a (I. A. 1439), length 72 cm.;
b (I. A. 1440), length 37 cm.

C
415 Plate XV. Baked clay vessels for cooking foods (Chiriguano).

Fig. 44 (I. A. 414). -- Height 24 cm.
Fig. 45 (I. A. 418). -- Height 23.5 cm.
Fig. 46 (I. A. 413). -- Height 26 cm.
Fig. 47 (I. A. 419). -- Height 22 cm.
Fig. 48 (I. A. 412). -- Height 12 cm.
Fig. 49 (I. A. 417). -- Height 22 cm.

Plate XVI

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→

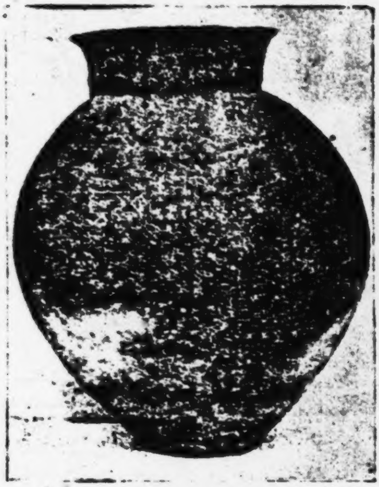


Fig. 50

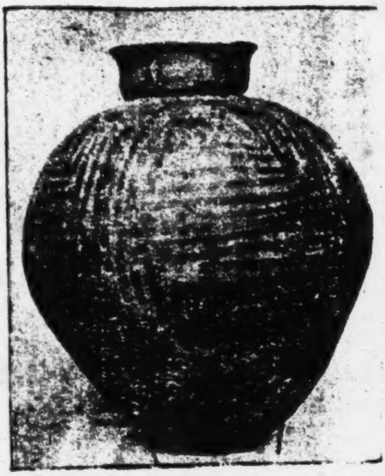


Fig. 51

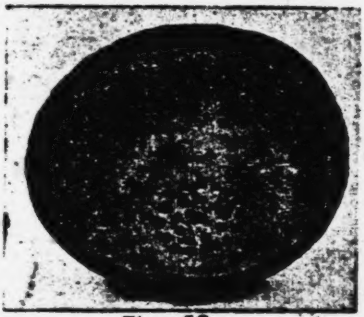
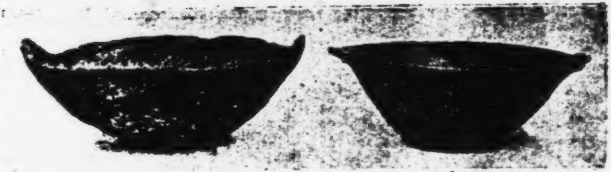


Fig. 52



a

b

Fig. 53

/The captions are on p. 120./

Chane SF8
Izozo

Plate XVII

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● c
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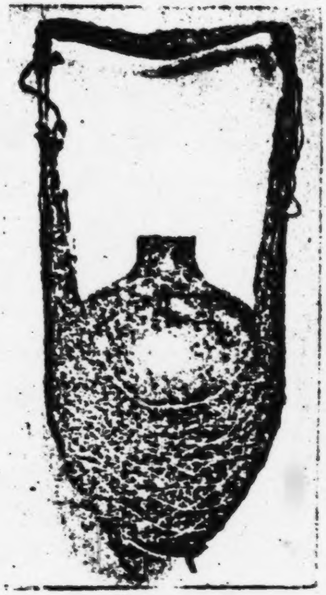

Fig. 5

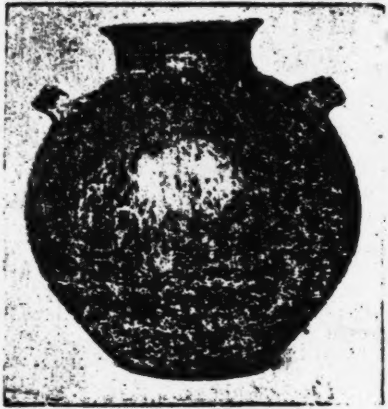

Fig. 55

Ce
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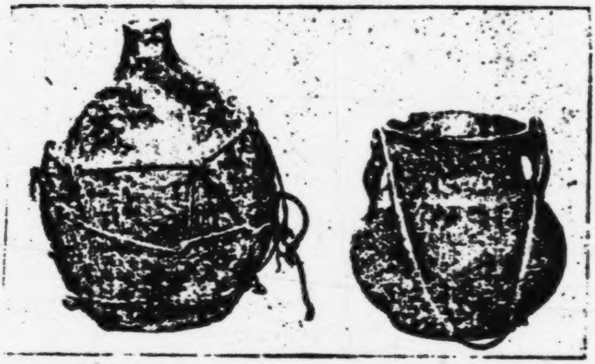
←

Ce
415
→



a b

Fig. 5

/The captions are on p. 120./

8: Schmidt--120 E-5 (1935) 1938 SF10 Chiriguano SF10
Chane SF8
Izozo

/Captions for Plates XVI and XVII./

c
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Fig. 50 (I. A. 399). -- Vessel for cooking maize meal for the preparation of chicha (Chiriguano), height 52 cm.

Fig. 51 (I. A. 397). -- Vessel for storing chicha (Chiriguano), height 62 cm.

Fig. 52 (I. A. 422). -- Baked clay dish with holes in the bottom for steaming maize meal (Chiriguano), height 12.5 cm.

Fig. 53: a (I. A. 400), vessel for frying /fritar/ maize (Chiriguano), height 14 cm.;
b (I. A. 401), vessel for storing food (Chiriguano), height 11.5 cm.

Plate XVII. Baked clay vessels.

ce
415
286
482

Fig. 54 (I. A. 761). -- Vessel with net, for carrying water (Izozó), height 40.5 cm.

c
415

Fig. 55 (I. A. 396). -- Vessel for carrying or storing water (Chiriguano), height 32 cm.

ce
415
284

Fig. 56: a (I. A. 606), vessel with an interlacing of thread (Izozó), height 24.5 cm.;

ce
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b (I. A. 617), vessel with a leather strap (Izozó), height 16 cm.

/49/

C 415 Among the four Chiriguano vessels of this kind, there are three different types. Two of them have a globular form of the belly and the well-marked distinction of the neck and of the flat bottom, like the cooking vessels, but the surface of the neck too, is smooth, and the handles are different. These, in contrast to the others, are placed in a position horizontal to the wall of the belly of the vessel, slightly above the maximum diameter.

The other two Chiriguano vessels of this kind do not have handles, and their aperture at the top, in comparison to the height, is relatively small. Vessel I. A. 393 has a round bottom, with the result that it cannot stand upright on a flat surface. Vessel I. A. 392, besides its very small aperture, has a cylindrical neck, narrow and relatively high, which can easily be encompassed by the hand.

Ce 415 The Izozó vessels for water have an aperture at the top that is relatively quite small. Three of them have a round bottom and hence cannot stand on a flat surface, while the bottoms of the rest are flat. The necks of all of these vessels are very little distinguished and that of vessel I. A. 608 is very short. Ce [531] The surface is smooth and unpainted. Vessels I. A. 761, 762, and 763 are inside a net, which indicates that they are special vessels for carrying water. Vessel I. A. 606 is clearly a vessel for the same purpose on account of an interlacing of thread on its lower part. None of these Izozó water vessels have handles except for two small vessels which are also different in form from the others. They have two handles which come down vertically from the upper rim. They also differ from the other vessels in their relatively large aperture at the top. Vessel I. A. 617 has a leather strap attached to its two handles.

8: Schmidt--122 E-5 (1935) 1938 SF10 Chiriguano SF10
Chane SF8
I2020

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● 415
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5. Vessels Used as Chicha Receptacles, from the Collection

I. A. 355 Chirig. (226). No handles. Ht. 15.5 cm. Max. dia. 20.5 cm. Apert. 15 cm.

226. Donated by D. María F. de Canati.

I. A. 368	Chirig.	No handles.	Ht.	27 cm.	Max.	dia.	34 cm.	Apert.	30 cm.	(Fig. 59)
I. A. 369	"	" "	"	27.5 "	"	"	42 "	"	42 "	(Fig. 60)
I. A. 370	"	" "	"	26 "	"	"	39.5 "	"	27 "	(Fig. 58)
I. A. 372	"	Two handles	"	20 "	"	"	24.5 "	"	21 "	
I. A. 373	"	" "	"	15 "	"	"	22.5 "	"	20 "	(Fig. 75a)
I. A. 374	"	" "	"	16 "	"	"	18 "	"	13 "	(Fig. 75b)
I. A. 375	"	No handles	"	13 "	"	"	28 "	"	28 "	(Fig. 67)
I. A. 376	"	2 handles, 1 broken		24 "	"	"	27 "	"	21 "	(Fig. 62)
I. A. 377	"	No handles	Ht.	26 "	"	"	30.3 "	"	24 "	(Fig. 57)
I. A. 378	"	Two handles	"	21.5 "	"	"	22.8 "	"	17 "	(Fig. 63)
I. A. 381	"	No handles	"	14 "	"	"	18.5 "	"	15 "	(Fig. 71)
I. A. 383	"	Two handles	"	12 "	"	"	15.7 "	"	13 "	(Fig. 74b)
I. A. 384	"	" "	"	13.5 "	"	"	16 "	"	11 "	
I. A. 386	"	" "	"	16 "	"	"	19.1 "	"	13 "	(Fig. 73b)
I. A. 387	"	" "	"	16 "	"	"	18.8 "	"	13 "	(Fig. 73a)
I. A. 397	"	No handles	"	62 "	"	"	53 "	"	24 "	(Fig. 51)
I. A. 398	"	" "	"	52 "	"	"	45.2 "	"	18.5 "	
I. A. 407	"	" "	"	9 "	"	"	17 "	"	17 "	(Fig. 77b)
I. A. 408	"	" "	"	8 "	"	"	18.5 "	"	17.5 "	(Fig. 77a)
I. A. 409	"	" "	"	7.2 "	"	"	13 "	"	13 "	

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I. A. 593	Isosó	" "	"	14 "	"	"	18.5 "	"	18.5 "	
I. A. 596	"	Two handles	"	16 "	"	"	16.2 "	"	11.5 "	(Fig. 68a)
I. A. 598	"	" "	"	13.2 "	"	"	25 "	"	25 "	
I. A. 600	"	No handles	"	13 "	"	"	25.7 "	"	25.7 "	(Fig. 76a)
I. A. 601	"	" "	"	22.5 "	"	"	26.7 "	"	23.5 "	(Fig. 69b)
I. A. 604	"	" "	"	29 "	"	"	27.4 "	"	24 "	(Fig. 61)
I. A. 605	"	" "	"	19.2 "	"	"	22.5 "	"	21.5 "	(Fig. 69a)
I. A. 622	"	" "	"	15.5 "	"	"	19 "	"	15.5 "	(Fig. 68b)

/50 cont./

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Among the vessels used as receptacles for chicha, those of the Chiriguano generally show different forms from those of the Izozó. The form of these Chiriguano vessels, especially that of the large ones, generally has a globular belly (cf. the figures 368 /see Fig. 59, p.129/, 370 /see Fig. 58, p.129/, and 377 /see Fig. 57, p.129/), while on the vessels of the Izozó the lower part of the belly becomes larger going upward and is commonly distinguished by a border on the upper part which becomes smaller going upward. (Cf. Figs. 61 /see p.129/, 68, and 69 /see p.132/.)

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The surface of all of these vessels is smooth and, with the exception of a few Izozó vessels, have designs on them. Only the large Chiriguano vessel I. A. 397 has a round bottom; all the other vessels have flat bottoms marked off from the belly by a border.

Among these Chiriguano and Izozó vessels there are some which have their maximum diameter at the aperture on top (cf. Figs. 60 /see p.129/ and 67 /see p.130/), which gives them the shape of a large dish. Vessels I. A. 397 and 398 differ from the rest by their height.

Of these Chiriguano pots, nine have handles and 12 do not. Of the eight Izozó pots, only two have handles. (Cf. Fig. 68a /see p.132/.) Most of these Izozó pots have the peculiarity that the necks, well distinguished by a border, become wider toward the upper rim. (Cf. Figs. 61 /see p.129/ and 69 a and b /see p.132/.)

8: Schmidt--124 E-5 (1935) 1938 SF10 Chiriguano SF10
Chane SF8
Izozo

/50 cont./

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6. Vessels Intended for Serving Chicha, from the Collection

	I. A. 347 (226)	Chir.	Ht.	18.3 cm.	Max. dia.	15.3 cm.	Apert.	10 cm.	(Fig. 65)
	I. A. 348 (226)	Chir.	Ht.	14.5 cm.	Max. dia.	14.7 cm.	Apert.	8 cm.	
	I. A. 349 (226)	"	Ht.	18.5 cm.	Max. dia.	18.2 cm.	"	5.2 cm.	
	I. A. 371	"	"	20	" " "	21.3	" "	8.5 cm.	
	I. A. 379	"	"	18.5	" " "	16	" "	6 cm.	
	I. A. 380	"	"	20	" " "	18.3	" "	8.5 cm.	(Fig. 82a)
	I. A. 382	"	"	18	" " "	14	" "	7 cm.	(Fig. 82b)
	I. A. 385	"	"	20.5	" " "	21.7	" "	9 cm.	
	I. A. 402	"	"	22	" " "	15.5	" "	12 cm.	
	I. A. 403	"	"	17.5	" " "	14.5	" "	14 cm.	(Fig. 64)
	I. A. 404	"	"	20	" " "	21.5	" "	9 cm.	(Fig. 74a)
	I. A. 405	"	"	19	" " "	19	" "	7 cm.	
Ce	I. A. 587	Izozó	"	18	" " "	16.2	" "	12 cm.	
415	I. A. 588	"	"	14	" " "	14.3	" "	12 cm.	
126	I. A. 590	"	"	13	" " "	12.8	" "	12.5 cm.	
	I. A. 609	"	"	14	" " "	12.5	" "	12 cm.	
	I. A. 623	"	"	20.5	" " "	18	" "	12.5 cm.	(Fig. 66)

/Fn. 226, which appears on p. 122, reads:
Donated by D. María F. de Casati./

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273

The Chiriguano and Chané use vessels like those mentioned above in the chicha festivities, taking the chicha from the large pots by means of them and filling the cuyas /gourd vessels/ or baked clay cups that they pass among those present at the fiesta.

Chane SF8
Izozo

/51/

C Ce 415 Among these vessels we must distinguish two different principal types. The vessels of the first type have the globular form of the belly, a narrowed part at the neck, a relatively small aperture, a flat bottom, and a vertical handle placed on the upper rim and coming down to the upper part of the
C Ce [177] belly. See Figs. 74 /see p.133/ and 82 /see p.144/. The second type, whose form was no doubt received from the whites, differs from the first primarily in that its aperture has a spout like modern vessels: See Figs. 64 and 65 /see p.130/. Vessels of this type also have a handle that, placed at the upper rim, comes down to the upper part of the belly.

C 415 In addition to these vessels I found one among the Chiriguano which corresponds in form to vessel I. A. 382, already mentioned among the vessels for carrying water. Like that one, it has a narrow, cylindrical neck that can easily be encompassed by the hand and has no handle. Because its surface has designs, I have included it among the vessels intended for serving chicha.

Ce 415 126

7. Vessels Intended for Drinking Liquids, from the Collection

I. A. 602	Izozó	Ht.	10 cm.	Max. dia.	12. 5 cm.	Apert.	10 cm. (Fig. 70b)
I. A. 603	"	"	8 cm.	" "	9 cm.	"	6 cm.
I. A. 610	"	"	8 cm.	" "	10. 5 cm.	"	8. 5 cm.
I. A. 611	"	"	9 cm.	" "	11. 5 cm.	"	8 cm.

C Ce 415 Among the vessels collected among the Izozó there are four in the shape of cups. From the types of vessels shown in drawings by Nordenskiöld (227), it is learned that similar cups

C Ce [177] coo are used by the Chané on the Itiyuru and by the Chiriguano. We must assume that the form of these cups is the result of the influence of European styles. These vessels have a globular

227. Nord. 2, Fig. 40, N. 26; Fig. 42, N. 22 and 23; Fig. 44, N. 19-21.

Chane SF8
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Ce 415 /51 cont./ These vessels have a globular form and are provided with a handle. The bottom of three of them is clearly distinct from the belly, forming a foot. Ce [531] Two of them have designs on the surface; the others are without designs.

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[126]

8. Vessels Used as Receptacles for Food, from the Collection

I. A. 394. Chiriguano. Height 17.5 cm. Aperture 44 cm.
I. A. 401. " " 11.5 cm. " 30 cm.

C [264] Two of the baked clay dishes that I obtained from the Chiriguano in Machareti seem to me to be too big to be considered as dishes for eating, because Nordenskiöld states that (228) the Chiriguano do not eat from a common dish, but rather each one has his own separate dish. We can assume that these are vessels used as food containers or serving dishes for food before it is placed on the individual dishes.

C [531] The two dishes are without designs. The flat bottom is well distinguished from the wall, which widens upward. The dish I. A. 401 has a rather wide rim which has two handles. Cf. Fig. 53b /see p. 118/.

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9. Vessels Used for Storing Objects

In contrast to the other Indians, the Chiriguano and Chané use vessels for keeping anything of value. I did not receive from the Indians any indication /52/ that any of the vessels I brought from them belonged particularly to this type. Therefore I refer here to a vessel shown in a drawing by Nordenskiöld with the caption "For keeping knicknacks in" /cited in English/ (229).

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228. Nord. 1, p. 190.

229. Nord. 2, p. 158 and Fig. 45, N. 19.

Chane SF8
Izozo

/52 cont./

Ce Ce 415 Nordenskiöld says in another place that the mistress of the house keeps all the family's valuable things, such as clothing, ornaments, silver plates, turquoise or chrysocolla necklaces, and many other things, in these vessels (230).

230. Nord. 1, p. 179.

C 415 126

10. Dishes for Eating (nyá e), from the Collection

I. A. 388	Chirig.	Height	6.5 cm.	Aperture	21 cm.	(Fig. 79a)
I. A. 389	"	"	8 cm.	"	23.5 cm.	(Fig. 79b)
I. A. 390	"	"	5.2 cm.	"	15 cm.	
I. A. 391	"	"	4 cm.	"	13 cm.	
I. A. 406	"	"	9 cm.	"	25 cm.	(Fig. 78a)
I. A. 586	Izozó	"	13 cm.	"	25.5 cm.	(Fig. 76b)
I. A. 591	"	"	9.5 cm.	"	16.5 cm.	
I. A. 594	"	"	9.5 cm.	"	21 cm.	
I. A. 595	"	"	9 cm.	"	20 cm.	(Fig. 80a)
I. A. 598	"	"	13.2 cm.	"	25 cm.	
I. A. 612	"	"	9.5 cm.	"	19 cm.	
I. A. 613	"	"	8 cm.	"	21 cm.	(Fig. 80c)
I. A. 614	"	"	9 cm.	"	22 cm.	
I. A. 615	"	"	10.5 cm.	"	27.5 cm.	
I. A. 616	"	"	10.5 cm.	"	22 cm.	
I. A. 618	"	"	10 cm.	"	18.5 cm.	
I. A. 620	"	"	15.5 cm.	"	15 cm.	

Ce 415 126

C Ce 415 1264 [531]

Because every Chiriguano and Chané, as already mentioned, eats from his own dish, such baked clay dishes are found in great number in the houses of these Indians. Many of them that are intended for ordinary use do not have designs, while others, used on the occasion of fiestas, have designs on their outer surface or on the upper rim of the interior surface, or are provided with small additions.

/52 cont./

C Ce 415 All of these dishes have a round belly, becoming somewhat larger going upward. The differences in form are limited only to variations of the upper rim and the bottom. The wall of some of these dishes ends at the top without forming a special rim. Cf. Fig. 76b /see p.143/. Other dishes have C Ce [531] a rim in a horizontal or oblique direction. The upper rim of dish I. A. 406 (cf. Fig. 78a /see p.143/) has small continuous incising. The flat bottom of most Izozó dishes is clearly distinct from the wall, forming a foot. This distinction of the bottom is lacking in most Chiriguano dishes, one of which has an almost round bottom.

Ce 415 [126] 11. Vessel used in Spinning, from the Collection I. A. 619. (Izozó). Height 5 cm. Aperture 12 cm. (Fig. 81b.)

Ce 415 283 Nordenskiöld (231) shows in drawings two small dishes of the Chané of the Parapití River, which, according to his statement, are used in the spinning technique /Plates XVIII-XXI appear here/ /53/ as a base for whirling the spindle on its Ce [174] bottom. The small dish I. A. 619, which I obtained from the Izozó and which differs from the other dishes in the collection principally because of its thick and heavy bottom, is similar, with regard to its form and its dimensions, to those two dishes published by Nordenskiöld, and thus I assume it to be for the same purpose, although I did not obtain any indication from the Indians regarding that.

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231. Nord. II, p. 165 and Fig. 44, No. 23 and 24.

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Plate XVIII

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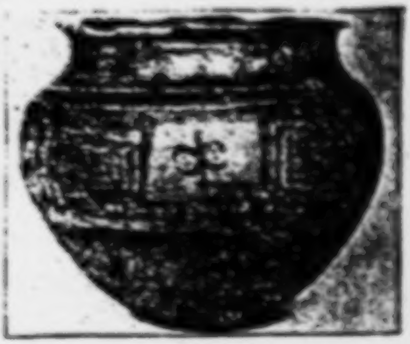

Fig. 57

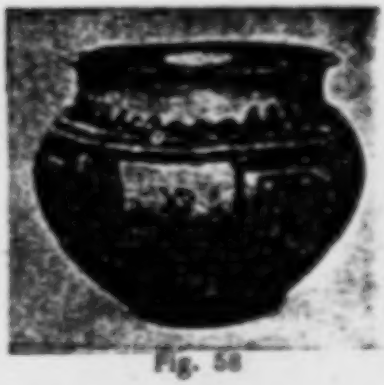

Fig. 58

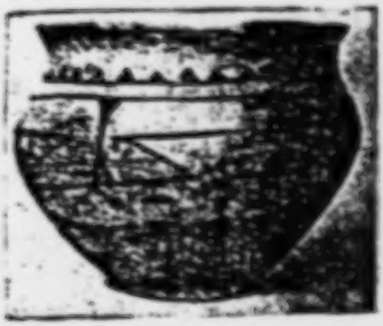

Fig. 59

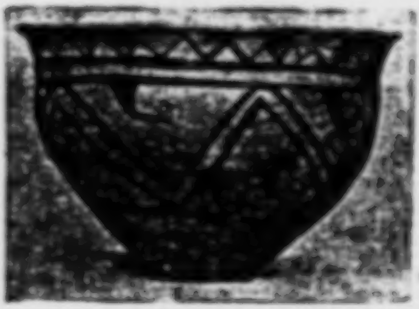

Fig. 60

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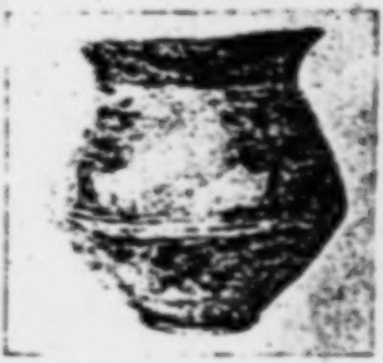

Fig. 61

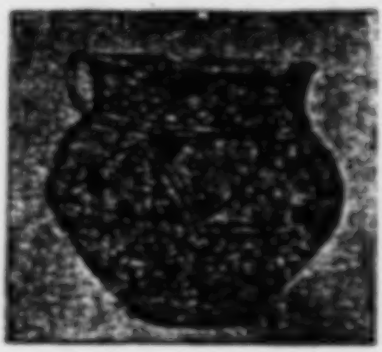

Fig. 62

/The captions are on p. 131./

Plate XIX

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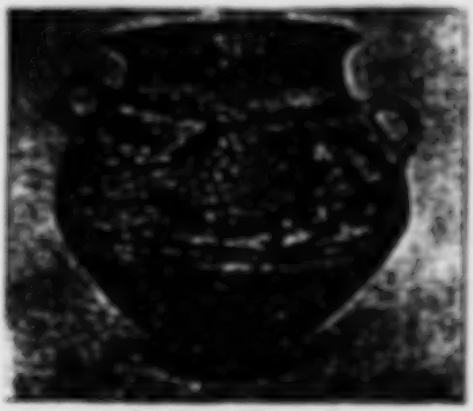

Fig. 63

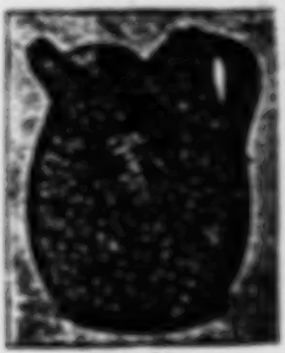

Fig. 64

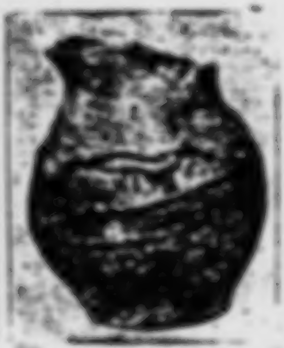

Fig. 65

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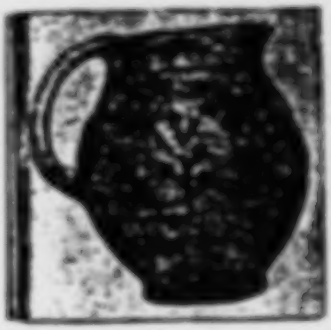

Fig. 66

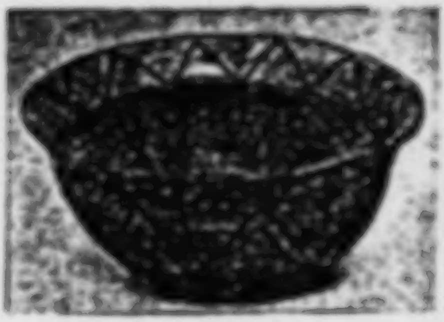

Fig. 67

/The captions appear on p. 131./

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/Captions for Plates XVIII and XIX./

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Plate XVIII. Baked clay vessels for chicha.

Fig. 57. (I. A. 377) (Chiriguano) Height 28 cm.
Fig. 58. (I. A. 370) (Chiriguano) Height 28 cm.
Fig. 59. (I. A. 368) (Chiriguano) Height 27 cm.
Fig. 60. (I. A. 369) (Chiriguano) Height 27.5 cm.
Fig. 61. (I. A. 604) (Izozó) Height 29 cm.
Fig. 62. (I. A. 376) (Chiriguano) Height 24 cm.

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Plate XIX. Baked clay vessels.

Fig. 63. (I. A. 378) Baked clay vessel for chicha (Chiriguano). Height 21.5 cm. Cf. Fig. 146 /see p. /.
Fig. 64. (I. A. 402) Baked clay vessel for serving chicha (Chiriguano). Height 17.5 cm. Cf. Fig. 145 /see p. /.
Fig. 65. (I. A. 347) Baked clay vessel for serving chicha (Chiriguano). Height 18.3 cm.
Fig. 66. (I. A. 632) Baked clay vessel for serving chicha (Izozó). Hgt. 20.5 cm.
Fig. 67. (I. A. 373) Baked clay vessel for chicha (Chiriguano). Height 13.5 cm.

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Plate XX

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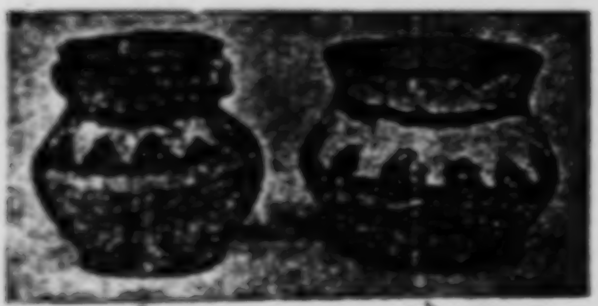

Fig. 68

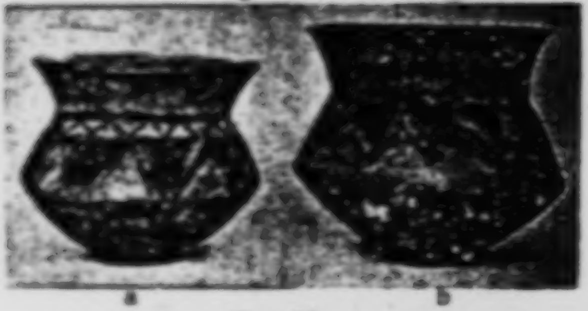

Fig. 69

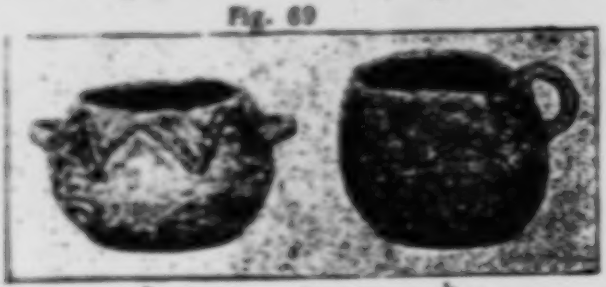

Fig. 70

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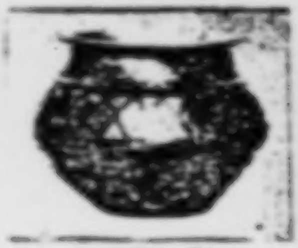

Fig. 71

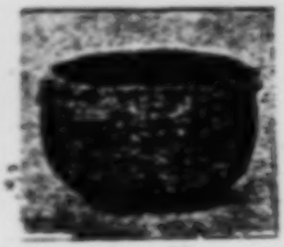

Fig. 72

/The captions appear on p. 134./

Plate XXI

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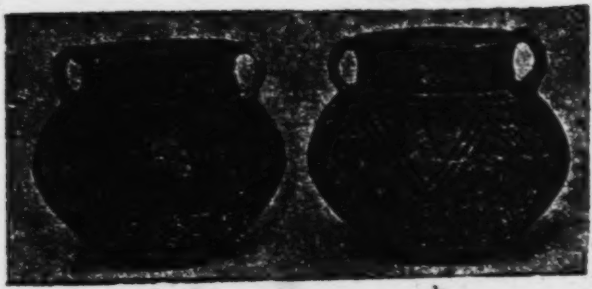
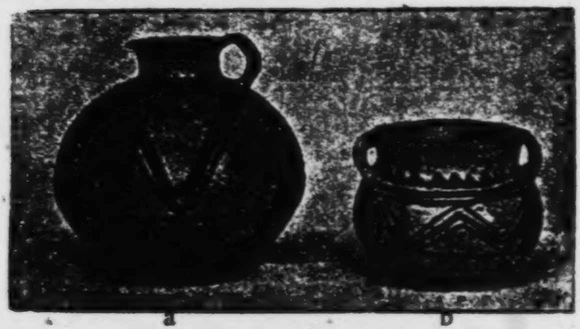


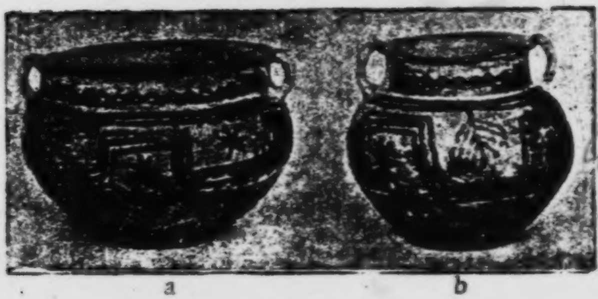
a b

Fig. 73



a b

Fig. 74



a b

Fig. 75

/The captions appear on p. 134./

8: Schmidt--134 E-5 (1935) 1938 SF10 Chiriguano SF10

Chane SF8
Izozo

/Captions for Plates XX and XXI./

Cc
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531 Fig. 68. Baked clay vessels for chicha (Izozó):
a (I. A. 596), height 16 cm.;
b (I. A. 622), height 15.5 cm.

Fig. 69. Baked clay vessels for chicha (Izozó):
a (I. A. 605), height 19.2 cm.;
b (I. A. 601), height 22.5 cm.

Fig. 70. Baked clay vessels (Izozó):
a (I. A. 599), height 9 cm.;
b (I. A. 602), height 10 cm.

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● [415]
[531] Fig. 71. Baked clay vessel for chicha (I. A. 381) (Chiriguano), height 14 cm.

Fig. 72. Baked clay vessel (I. A. 597) (Izozó), height 10.5 cm.

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531 Plate XXI. Baked clay vessels (Chiriguano).

Fig. 73. Vessels for chicha:
a (I. A. 387), height 16 cm.;
b (I. A. 386), height 16 cm.

Fig. 74. a (I. A. 404), vessel for serving chicha, height 20 cm.;
b (I. A. 383), vessel for chicha, height 12 cm.

Fig. 75. Vessels for chicha:
a (I. A. 373), height 15 cm.;
b (I. A. 374), height 16 cm.

/53 cont./

12. Funerary Urns

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In the chapter on the treatment of illnesses and burial, I have already dealt with the Chiriguano custom of placing their dead inside funerary urns and of closing these with other vessels. According to Nordenskiöld (232), the large baked clay vessels used for preparing and keeping chicha also serve as funerary urns. Because among those Indians burial in funerary urns is a direct burial, that is, the entire corpse is placed within the urn, the vessels selected for funerary urns must be large enough to have room for the corpse of an adult. Unfortunately, I was unable to bring such large vessels from [126] Machareti. The largest of the vessels that I brought, 52 cm. and 62 cm. in height, are not big enough for an adult, and in particular their apertures on top, which measure only up to 24 cm., are too small to be able to squeeze in a dead person. Therefore, with reference to funerary urns and their respective tops, I refer to the drawing made by Nordenskiöld (233). Outes has published a Chiriguano vessel with a height of 27.5 cm. and an aperture on top of 27.5 cm., which had served as a funerary urn for a small child. With the urn was found a small baked clay dish approximately 6 cm. high (234).

Outes' data show that the vessels of the Chiriguano can reach quite large dimensions (235). Among the vessels

232. Nord. 1, p. 278.

233. Nord. 1, Fig. 113.

234. Felix F. Outes, op. cit., p. 135 and Figs. 30 and 31.

235. Felix F. Outes, op. cit., pp. 127 and 128.

C /53 cont./

764 ● 415 described by him there is one which is 92 cm. high and has an aperture at the top 70 cm. in diameter. Another is 110 cm. high and its maximum diameter measures 85 cm. In 1845, in Capirendá, Wedell found such vessels with a height of 120 cm. and a maximum diameter of 100 cm. for the wall of the belly.

C 415 126

13. Various Vessels with No Indication Regarding Their Purpose, from the Collection

I. A. 410 (Chirig.). Ht. 14.5 cm. Max. dia. 8 cm. Apert. 5 cm. (Fig. 81b).
I. A. 411 ("). Ht. 13.5 cm. Length 21 cm. (Fig. 81a).
Ce 415 126 I. A. 597 (Izozó). " 10.5 cm. Max. dia. 16.7 cm. Apert. 15 cm. (Fig. 72).
I. A. 599 (") " 9 cm. " " 13 cm. " 10 cm. (Fig. 70a).

C Ce 415 177 We have no evidence regarding the purpose of these four vessels which are different in form from the other types of vessels. We must regard the small, double vessel I. A. 411 (cf. Fig. 81a /see p.144/) as a special result of the mixture of various, but different cultural elements. The way in which the two small dishes are joined to form a double vessel /54/ corresponds to ancient Peruvian models, while the form of the handle, fitted with a ring, is doubtless an addition of European origin. The whole has the form of a salt cellar and was perhaps made to be sold to the whites for this purpose. We must also consider the vessel I. A. 410 (cf. Fig. 81b /see p.144/) as merchandise, while the two vessels I. A. 597 and 599 seem to be manufactured for some use in festivities.

C Ce [439]

Baked Clay Spindle Whorls

C Ce 283 323 The spindle whorls collected among the Chiriguano and Izozó are of baked clay or wood, and the Chiriguano also have some spindles with stone whorls. Because I shall deal with spindle whorls in the chapter on spinning, I wish only to

Plate XXII

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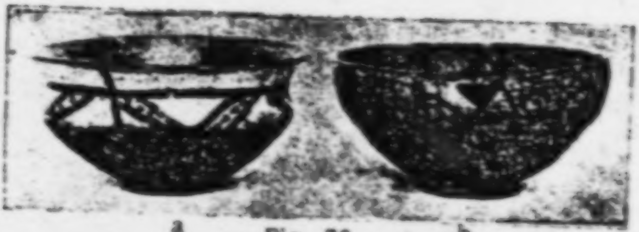

Fig. 76

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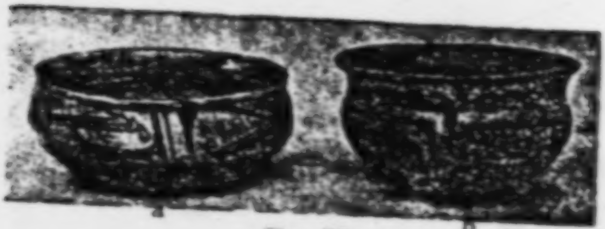

Fig. 77

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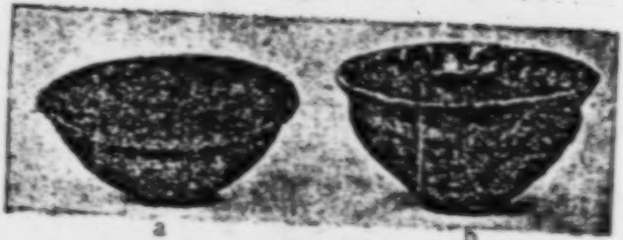

Fig. 78

c
415
531

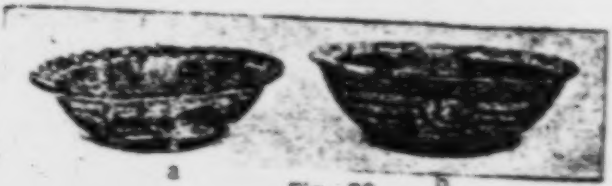

Fig. 79

ce
415

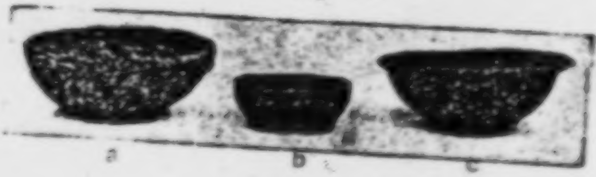

Fig. 80

/The captions are on p. 145./

Chane SF8
Izozo

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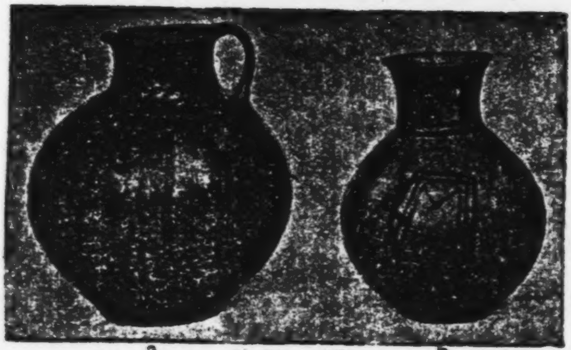
Plate XXIII

a Fig. 81 b



a Fig. 82 b

ce
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←

c
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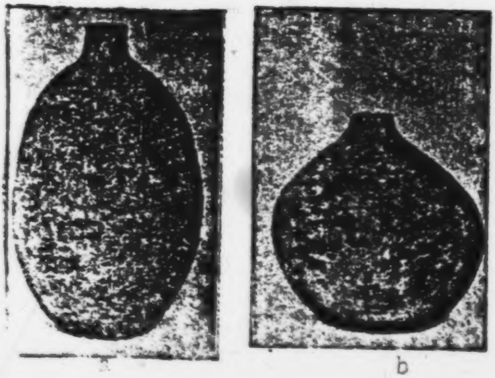
→



a b

Fig. 83

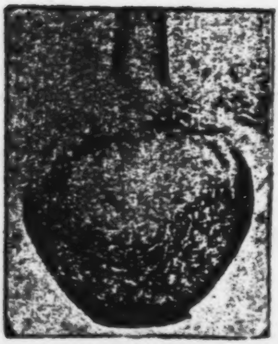


Fig. 84

/The captions are on p. 145./

Chane SF8
Izozo

Ce /Captions for Plates XXII and XXIII./

415

531 Fig. 76. a (I. A. 600), vessel for chicha (Izozó), height 13 cm.;
b (I. A. 586), eating dish (Izozó), height 13 cm.

C
● 415 Fig. 77. Vessels for chicha (Chiriguano):
531 a (I. A. 408), height 8 cm.;
b (I. A. 407), height 9 cm.

C
415 Fig. 78. a (I. A. 406), eating dish (Chiriguano), height 9 cm.;
Ce b (I. A. 598), eating dish (Izozó), height 13.2 cm.
415

Fig. 79. Eating dishes (Chiriguano):
C
415 a (I. A. 388), height 6.5 cm.;
531 b (I. A. 389), height 8 cm.

Fig. 80. a (I. A. 595), eating dish (Izozó), height 9 cm.;
Ce
415 b (I. A. 619), vessel used in the spinning technique as a base for the spindle (Izozó), height 5 cm.;
c (I. A. 613), eating dish (Izozó), height 8 cm.

C
415 Plate XXIII. Baked clay vessels.

531 Fig. 81. Chiriguano:
a (I. A. 411), height 13.5 cm.;
b (I. A. 410), height 14.5 cm.

Fig. 82. Vessels for serving chicha (Chiriguano):
a (I. A. 380), height 20 cm.;
b (I. A. 382), height 18 cm.

Ce Fig. 83. Vessels for carrying or storing water (Izozó):
415 a (I. A. 621), height 28.5 cm.;
b (I. A. 608), height 19.5 cm.

C Fig. 84. (I. A. 392) Vessel for carrying or storing water
415 (Chiriguano), height 25 cm.

Chane SF8
Izozo

/60 cont./

C Plaited objects of the first type are made in such a way
285 that the strips of one group are plaited with the strips of another
group vertical to the first one, in such a way that the strips of
the first group pass alternately a certain number of the strips of
the second group and are passed by them, and in such a way
that the meshes which go in the same direction form lines of
steps. The number of the strips passed each time by one strip
of the other group is generally three or two at a time, but there
are cases in which only one strip is passed each time.

C Among the plaited objects of this type, I obtained from
[126] the Chiriguano a large sleeping mat, small flat baskets
[513] /canastillas/, sieves, a quadrangular basket /cesta/, and a hat,
● [415] [291] and from the Izozó small flat baskets /canastillas/similar to those
Ce of the Chiriguano and two different kinds of baskets /cestas/. In
[415] addition, the Chiriguano and Chané also infrequently use fans
[126] for fanning the fire (tapèkua) plaited out of palm leaves (260).

C
Ce
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372

260. Nord. 1, p. 56.

C
Ce
[824]

Métraux has described and shown in a drawing such a fan for fanning the fire. This fan is plaited out of the leaves of the caranday palm in the "Stufengeflechte" style, in such a way that strips of the first group pass alternately two strips of the second group and are /Plates XXVI-XXVII appear here/ /61/ passed by them. The leaflets, separated from the stem, enlace a stick which, forming the upper edge of the fan, replaces the stem of the pinnate leaves of other palms which are used by other tribes of South American Indians in the manufacture of plaited fans (261).

261. Métraux I, pp. 460 and 461 and Plate 85.

/65 cont./

● 415 Wooden Hoops for Storing Possessions, in the Collection

[126]

I.A. 580.	A pair of hoops (Chiriguano).	Diameter	53 cm.	
I.A. 581.	" " " "	"	51 cm.	
I.A. 582.	" " " "	"	46 cm.	
I.A. 583.	" " " "	"	43 cm.	(Fig. 41).
I.A. 584.	One hoop "	"	48 cm.	

[285] In the Chiriguano houses in Macharete I found hanging wooden hoops, which, usually in pairs, served for storing various possessions of the Indians. The circular area of the hoops is filled in with strips of cane that are stretched across the hoop and interwoven as Figure 41 shows. The hoops are provided with strings or strips of leather in order to be hung in the houses (268).

268. See Métraux I, p. 471, Figs. 126 and 127.

285 Modern Plaited Objects in the Collection

126

I.A. 503.	Basket	(Chiriguano).	Diam.	18 cm.	Height	12.5 cm.
I.A. 550.	"	"	"	27 cm.	"	13 cm.
I.A. 552.	"	"	"	31 cm.	"	23 cm.
I.A. 553	Flat basket	"	"	56 cm.	"	16 cm.

/66/ I obtained from the Chiriguano some baskets whose technique is completely different from the technique of the baskets described above. They are so similar to the baskets *commonly used by the Paraguayans that we must consider them* products of an absolutely modern craft, and it is not necessary for us to deal with their technique. Nordenskiöld and Métraux show in sketches and describe such baskets of the Chiriguano, among which some have handles and others lids (269). [171] 285

269. Nord. 2, p. 171 and Figs. 53 and 51. Métraux I, pp. 444-453, Plates 73-77.

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Plate XXX

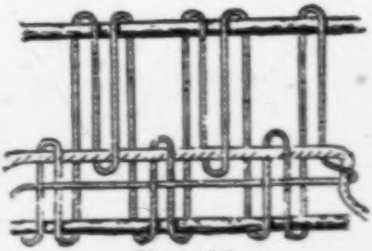
Fig. 105

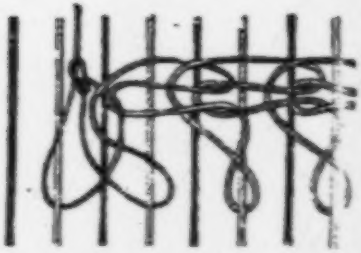
Fig. 106

Ce
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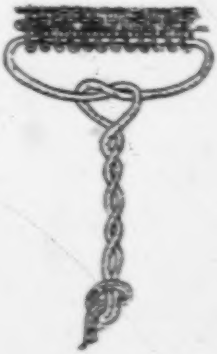
Fig. 107

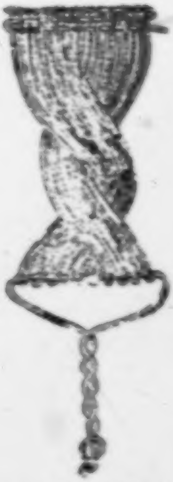
Fig. 108

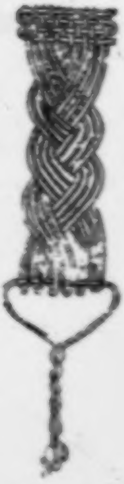
Fig. 109

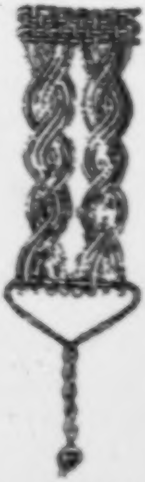
Fig. 110

C
Ce
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● 415

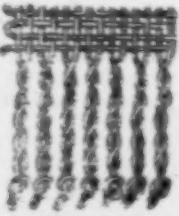
Fig. 111

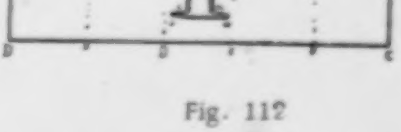
Fig. 112

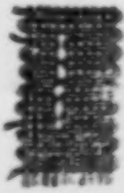
Fig. 113

/The captions appear on p. 179./

C
Ce /69 cont./
291 6. Fajas. I.A. 428-441 (Chiriguano) (I.A. 423, Figs. 119b
126 and 123; I.A. 430, Fig. 124; I.A. 436, Figs. 119a and 121).

I.A. 803-807 (Izozó) (I.A. 803, Figs. 119c and 122).

Ce
492
126 7. Saddle covers.

I.A. 842 (Izozó). Of wool. Length 0.69 m. Width 0.67 m.

I.A. 843 " " " 1.42 m. " 0.62 m. (Figs. 103a and 126.)

C
415
126 8. Carrying bag (Chiriguano). Of wool. Length 1.07 m. Width 0.45 m. (Fig. 131a.)

[492] 9. Double bags for carrying loads on asses or horses.

I.A. 445. (Chirig.) Wool. Entire lgth. 92 cm. Width 37 cm. (Figs. 115 and 131b.)

Ce
492
415
126

I.A. 811.	(Izozó)	Wool.	Entire lgth.	93 cm.	Width	46.5 cm.	(Fig. 132.)
I.A. 821.	"	Cotton.	" "	94 cm.	"	40 cm.	
I.A. 822.	"	"	" "	106 cm.	"	36 cm.	
I.A. 839.	"	"	" "	97 cm.	"	35 cm.	
I.A. 840.	"	"	" "	104 cm.	"	36 cm.	
I.A. 841.	"	Wool	" "	92 cm.	"	46 cm.	

Ce
291
286 Of the three tipoys in the collection acquired from the Izozó, one (I.A. 820) consists of a fabric in the form of a sleeve made with the warp in this form. The woolen tipoy (I.A. 832) was lengthened by sewing together two such woven pieces, one beside the other. The structure of the weaving clearly shows the thread which was extended between the two vertical poles of the loom before making the warp, and which remained in the cloth. Tipoy I.A. 838 is not typical and consists of a flat piece of weaving whose two facing edges were sewed together.

C
Ce
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286 With regard to the making of ponchos, we must mention that those of the Chiriguano consist of two pieces of woven material sewed to each other in the direction of the slit of the poncho, while Izozó ponchos most often consist of a single piece of weaving made across the entire width of the loom and therefore do not show a seam in the middle part such as Chiriguano ponchos show. From the stiff edges in the direction of the woof, it can clearly be seen that the special mechanism

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C
Ce /70 cont./

291
286 The manufacture of the fajas of wool or cotton is like that of the men's hair bands woven of human hair. The manner of securing the loops of the free threads at the end of the fajas is also in general the same, as Figure 111 shows, except only that the fringes consist of more than one of these loops, with the result that they form thicker, twisted threads, which end in knots.

Ce
492
286 Of the two saddle covers, one (I. A. 842) is woven in the ordinary fashion of mantas, while the other, I. A. 843, shows in its manufacture the peculiarity that each time two woof threads pass through the same division of warp threads this is done in such a way that one of these two woof threads passes through the division from left to right, and the other from right to left. The diagram shown in Figure 126 shows the course of this double woof thread and also shows how in this way they manage to make the edge of the piece of weaving firmer than it would have been had the two woof threads passed through the division of warp threads in the same direction.

C
● 415
286 The weaving from which the Chiriguano bag I. A. 444 was made was not made up of a fabric in the form of a manta. By sewing up the two narrower sides, there was first made a piece in the form of a sleeve, from which the bag was made by sewing the edges together, leaving only one part open for the opening.

The double bags mentioned above are made of a flat fabric of either wool or cotton thread, by folding over the two ends and sewing the edges together. The diagram shown in Figure 112 shows the flat fabric before the edges are sewed. All the outside edges of the material are secured by the process of weaving itself, since the fabric is first made in the form of a sleeve and then changed into a flat piece by removing the thread which was extended between the two vertical poles of the loom. Also, the edges, indicated in the diagram by EF, GH, EI, GL, FK, and HM, are secured by the weaving process, which was managed by passing the woof thread through the divisions of the warp, only by parts in the way we know for making the slit in ponchos. Only in those places indicated on the diagram as JL and MK are the warp threads cut in such a way that these sides of the piece

C /70 cont./

● 415 286 of weaving are not secured by the weaving process itself. In order to change the piece of weaving described in the foregoing into the double bag, its two ends are folded over at the dotted lines in the diagram, with the result that points A, B, C, and D are placed on top of points A/, B/, C/, and D/. Then the edges which are placed one on top of the other (OA/, OB/, PD/, and RC/) /71/ are sewed together. The parts EILG and FKMH are doubled in the opposite direction to form the tops of the double bag.

C Ce 286 531 171 In accordance with the simple mechanism of the loom with which the Chiriguano and the Chané-Izozó make their textiles, the possibilities of producing variations in the ornamentation of these are very limited. The variations in ornamentation of the weavings of the Chaco tribes, such as, in particular, those of the Churupí /Chulupi/, which consist of frets, zigzags, rhombuses, and many other figures, are not found among the ornamentations of the weavings of the Chiriguano and Chané.

C Ce 286 531 [177] Because today the woven goods of these Indians, especially the fajas and the ponchos, are often woven with imported thread or, if they are woven with native wool or cotton thread, these are often dyed with imported dyes, the different colors of the ornamentation on the surface of these weavings have no ethnological importance.

The ornamentation is formed exclusively by the warp threads, due to the fact that the distance between the warp threads is much less than the distance between the wax threads, so that the meshes of the woof disappear completely under those of the warp. Because, outside of that, the formation of the divisions of the warp threads is done by a single mechanism of loops, it can consist only of raising and lowering alternately the even and odd warp threads, for which reason the ornamentation still cannot be influenced by the process of the operation of weaving itself. The structure of this kind of weaving is necessarily such that in the direction of the woof thread, thus vertical to the direction of the warp threads, a row of the meshes formed by the odd warp threads is alternated each time with a row of the meshes formed by the even warp threads. Thus

C /72 cont./

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126

Weavings Made without a Special Mechanism for Making the Divisions of the Threads of the Warp, from the Collection

I. A. 450. Hammock (Chirig.) of wool. Lgth 2.85 m. Width 0.60 m. (Fig. 102a.)

Ce
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I. A. 768. Carrying net provided with a woven caraguata band (Izozó). Length of band 49 cm. (Figs. 125 and 133.)

I. A. 802. Band for a carrying net (Izozó). Caraguata. Length 49 cm.

C
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[415]
[482]
[352]

With regard to their exterior structure too, the bands with which many of the carrying nets (of the Izozó and some of the Chiriguano ones) and one Chiriguano hammock are provided are similar to the weavings. But these /Plates XXXII-XXXV appear here/ /73/ objects are made without any special mechanism for making the divisions of the warp threads.

Figure 125 shows the structure of the band of the net I. A. 768. (Cf. Fig. 133 /see p. 200/.) The diagram shows the way in which these bands are made. First the longitudinal threads are stretched in a way similar to the manner of stretching the warp threads of common weavings between the horizontal poles of the frame of the loom, but without using the special thread extended between the two vertical poles of the loom. Then they pass a transverse thread, which corresponds to the woof thread of common weavings, through the two rows of longitudinal threads alternately from the right to the left and from the left to the right, in such a way that this thread is left alternately under one thread of the back row of longitudinal threads and on top of one thread of the front row. Thus the manufacture of these bands and of hammock I. A. 450 is different from that of common weavings principally in the fact that the woof thread passes simultaneously through the threads of the front side and of the back side of the warp. Sundry irregularities in the course of the threads of the warp show that weavings of this kind have been made without using a mechanism for making the divisions of the warp threads.

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Plate XXXV

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[482]

C
[492]

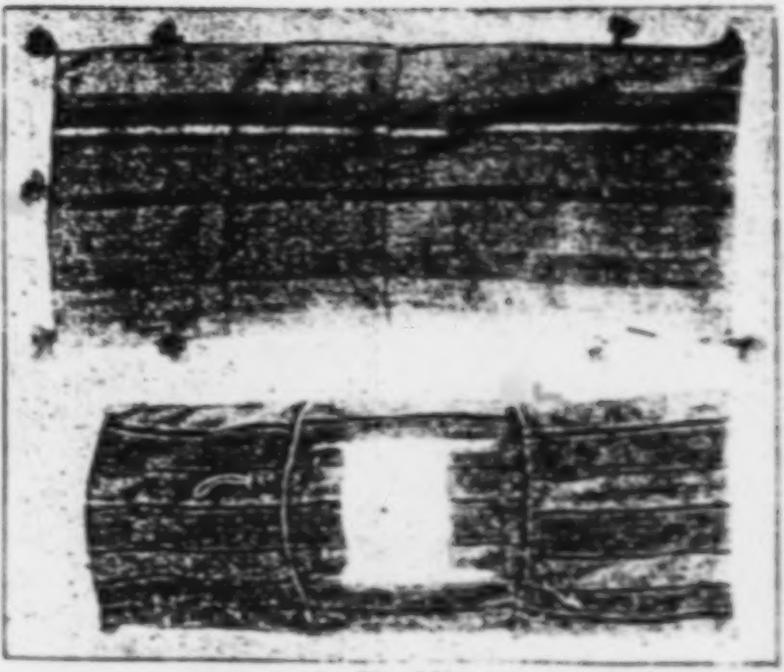

Fig. 131

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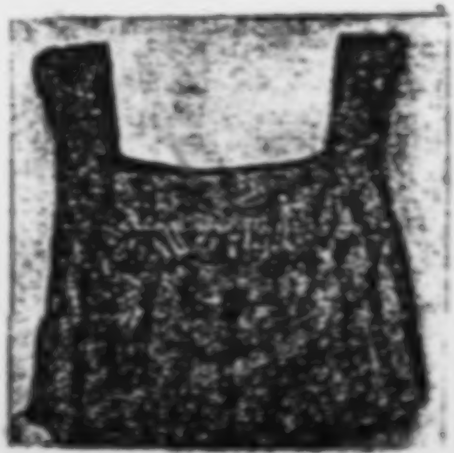

Fig. 132

/The captions are on p. 192./

Ce
286 /Plate XXXIV. Diagrams to illustrate the techniques of weaving, plaiting with "double thread," and sewing.

Fig. 125. Diagram to illustrate the technique of weaving, from the band of the net for carrying loads I. A. 768. Cf. Fig. 133 /see p. 200/ (Izozó).

Fig. 126. Diagram to illustrate the technique of weaving, from the saddle cover I. A. 843 (Izozó). Cf. Fig. 103a /see p. 174/

C
286 Fig. 127. Diagram to illustrate the technique of plaiting with "double thread," from the hammock I. A. 448 (Chiriguano). Cf. Fig. 102b /see p. 174/.

Fig. 128. Diagram to illustrate the technique of plaiting with "double thread," from the hammock I. A. 449 (Chiriguano).

Ce
286 Fig. 129. Diagram to illustrate the technique of plaiting with "double thread," from the saddle cover I. A. 844 (Izozó). Cf. Fig. 103b /see p. 174/.

Ce
286
415 Fig. 130. Diagram to illustrate the technique of sewing two cuyas:
a (I. A. 666) (Izozó);
b (I. A. 667) (Izozó).

C
531 Plate XXXV. Woven bags, of wool.

● 415
286
[482]
[492] Fig. 131. a (I. A. 444) Woolen bag for carrying loads (Chiriguanc), length 1.07 m., width 0.45 m.
b (I. A. 445) Double bag for loading horses (Chiriguano), entire length 92 cm., vidth 37 cm.

Ce
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531 Fig. 132. (I. A. 811) Double bag for loading horses (Izozó), entire length 80 cm., vidth 46.5 cm.

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Izozo

/74/

Ce 286 352 126

Nets of the Collection That Are Made with the Technique Called "Knotentechnik" in German. Using the Knot Called Reef Knot in English

I. A. 360. Hammock (276) (Chané of the Parapiti). Caraguata.

276. Gift of Mr. Teodoro Rojas.

Length 3.20 m. (Fig. 102c.)
I. A. 766. Hammock (Izozó). Caraguata. Length 1.80 m.
C I. A. 794. " " " " 2.70 m.
Ce I. A. 446. Net for carrying loads (Chiriguano). Wool. Lgth 1.05 m.
286 I. A. 447. " " " " " " " 0.75 m.
415 I. A. 561-564, 567, 569-571. Nets for carrying loads (Chiriguano).
482 Caraguata. Length between 1.50 and 0.50 m.
126 (I. A. 567, Figs. 134 and 143; I. A. 568, Fig. 144.)
I. A. 767-787; 790-792. Nets for carrying loads (Izozó). Caraguata. Length 1.60 m. and 0.65 m. (I. A. 768, Figs. 133 and 142; I. A. 772, Fig. 135.)
Ce I. A. 785. Bag (Izozó). Caraguata. Length 0.82 m. Height 0.48 m.
415 I. A. 788 " " " " 0.62 m. " 0.62 m.
286 (Fig. 136.)
126 I. A. 793. Quadrangular net (Izozó). Caraguata. Length 0.90 m.
Ce I. A. 764. Implement for fishing with net (Izozó). Length 73.5 cm.
[227] (Fig. 39.)
I. A. 795-801. Nets for implements such as I. A. 764 (Izozó). Caraguata.
C I. A. 508. Sling (Chiriguano). Caraguata. Length 15 cm.
411 I. A. 509. " " " " 14 cm.
286

C Ce 286 352 227 136 From the large size of the mesh of nets I. A. 360, 766, and 794, it follows that they are hammocks. Because in Chiriguano and Chané territory there are generally no fish except small ones, nets for fishing must have considerably smaller meshes.

C Ce 415 286 482 [283] Of the Chiriguano nets for carrying loads, two are made of wool and one of these has a band like most such nets from the Izozó. The rest of these nets from the Chiriguano and the Izozó are made of caraguata thread. Some of them have a rather small mesh, but among those of the Izozo those with big mesh are the rule.

/74 cont./

000 small mesh, but among those of the Izozó those with big mesh are the rule. Thus the mesh of the Izozó nets used for carrying the large water jars is also very large. Most of these Izozó nets have a special band that goes over the forehead of the bearer. The structure of these bands, which are made of caraguata, wool, or cotton, have already been described by us in the chapter on weavings. Cf. Figure 133 /see p. 200/ and the diagram shown in Figure 125 /see p. 190/. Ce 286 415 482

Ce 286 415 [126] The collection has two net bags from the Izozó which are made in such a way that the whole rectangular net is folded in the middle and the pieces which are on top of one another are laced together with a thread on the two longitudinal sides.

Ce 286 227 In the way described in the foregoing they also make the net of the fishing implement I. A. 764 described in the chapter on fishing and shown in Figure 39. Because this implement is used to catch small fish, the net has very small mesh. The Ce [411] [224] slings described among the hunting implements are also made in the same way.

/75/

C 286 415 482 [126]

Burden-carrying Net Made by the Technique Called "Knotentechnik" in German, But Using the Knot Called "Sheet Knot" in English from the Collection

I. A. 573. Net for carrying loads (Chiriguano). Strips of animal hide. Length 0.86 m.

C [284] This net is made like the nets described in the foregoing, made of knots, but the knot used is the type called "sheet knot" in English and "Schotenstich" in German. This knot is shown in Figure 138, c and d. According to Nordenskiöld (277), the

277. Nord. 2, p. 184.

Chiriguano also have fishing nets which are made using this type of knot.

/75 cont./

286 415 482 [126]

Nets in the Collection That Are Made with Loops and without the Use of Knots

I. A. 555-566.	Net for carrying loads (Chirig.). Lgth.	0.97 m.-1.80 m.
I. A. 567.	" " " " " "	1.15 m. (Figs. 136 and 143.)
I. A. 568.	" " " " " "	1.70 m. (Fig. 144.)

286 254 415 482 From the Chiriguano I obtained several nets for carrying burdens, which are made without using knots, by connecting the thread in the fashion illustrated by Figures 143 and 144 and which is common among many tribes of the Chaco, as happens among the Tapieté, Matako /Mataco/, Toba, Chorote /Choroti/, and Churupí /Chulupi/.

The great number of nets that I acquired from the Isosó are made with knots without exception, and we must therefore assume that these Indians are not familiar with or do not use the technique of making nets with simple loops and without applying knots, and that this technique, called "Schlingtechnik" in German, is used only by the Chiriguano or a part of them. Nordenskiöld does not mention this technique among the Chiriguano, and in the synoptic outline in which the several techniques of making nets are illustrated the Chiriguano are not mentioned in Column 5 among the Indian tribes which use the technique of making nets without applying knots. Of the burden-carrying nets made of caraguata thread that I acquired from the Chiriguano, ten are made without knots being applied, by the technique called "Schlingtechnik," and only seven by applying knots by the technique called "Knotentechnik." We can therefore assume that this part of the Chiriguano at least uses the technique of making nets without applying knots, although this opinion is contrary to that of Nordenskiöld, who says (278) that all of the nets made by this technique found among the Chiriguano and the Chané were acquired from the Chaco Indians.

286 254 114 177

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278. Nord. 2, p. 116.

Chane SF8
Izozo

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412
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[296]

/75 cont./

Net Bags Made by the Toba, from the Collection

I. A. 572. Bag for carrying burdens. (Found among the Chiriguano)
Length 0.70 cm.

I. A. 843. " " " " (Found among the Izozó)
Length 57 cm.

I acquired two net bags, one from the Izozó and the other from the Chiriguano, which show differences from the techniques mentioned in the foregoing. The Izozó and the Chiriguano told me that they themselves had not made these bags and that they had obtained them from the Toba.

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/76/

Sewing

With the acquisition of European clothes, naturally the sewing of these clothes to make and mend them became general among the Chiriguano and Chané. Modern sewing needles are an article eagerly sought by them today. But undoubtedly these Indians had already known the technique of sewing with a needle with an eye for a long time through their contact with the culture of the ancient Peruvians. Although the native textiles are, in most cases, made in one piece, needlework coming from other cultures is often added to the native technique of these textiles. I mentioned that a large Izozó *tipoy* is made of two smaller *tipoys* sewed together. The ponchos of the Chiriguano in Machareti are made of two pieces sewed together. The four edges of the Chiriguano and Izozó ponchos most of the time are turned and sewed to the rest of the fabric. In the making of the bags for carrying burdens, especially the double bags for loading draft horses or burros, sewing is used.

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Among the *cuyas* that I obtained from the Chiriguano and Izozó there are several which show breaks mended by sewing. See Figure 99a /see p. 51/. The two diagrams shown in Figure 130 a and b serve to illustrate the way in which this sewing is done, with cotton thread on the two Izozó *cuyas* I. A. 666 and 667, and with fine wire on the Chiriguano *cuya* (I. A. 480). The *cuya* I. A. 667 shows two such repairs done by sewing.

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C /78 cont./

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On the Cooking of Meals

252 Most of the Chiriguano and Chané utensils used /Plates
[415] XXXVI-XXXVII appear here/ /77/ for cooking meals have al-
[412] ready been mentioned in the preceding chapters, such as pots
for cooking food and for fermenting chicha, dishes with holes
in the center of the bottom for steaming maize meal, vessels
for frying /fritar/ maize, wooden mortars with their pestles,
C and sieves. For frying /fritar/ meat or fish, the Chiriguano
CC and Chané do not use the quadrangular or triangular stands
[171] which are so common among other South American Indians,
C CC but instead simple wooden spits (282). Also, as we have already
[412] said, the grater for grating mandioca roots is not found among
these Indians.

Ec We have yet to mention two other utensils used by the
[415] Chiriguano and Chané for fixing their meals, the large wooden
[412] dish and the spatula for stirring foods or drinks when they are
boiling or fermenting.

C

Large Wooden Dishes (Platters) in the Collection

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126 I. A. 574. (Chirig.) Lgth 0.83 m. Width 0.39 m. (Fig. 19.)
I. A. 575. " " 1 m. " 0.325 m.

Unfortunately I did not obtain data regarding the special use of these large wooden dishes which I acquired from the Chiriguano in Machareti. As Fig. 19 shows, these large wooden dishes are provided with the same handles as the smaller wooden dishes which serve as vessels for eating.

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282. Nord. 2, p. 55. Métraux I, p. 352 and Figure 22.

Chane SF8
Izozo

Plate XXXVI

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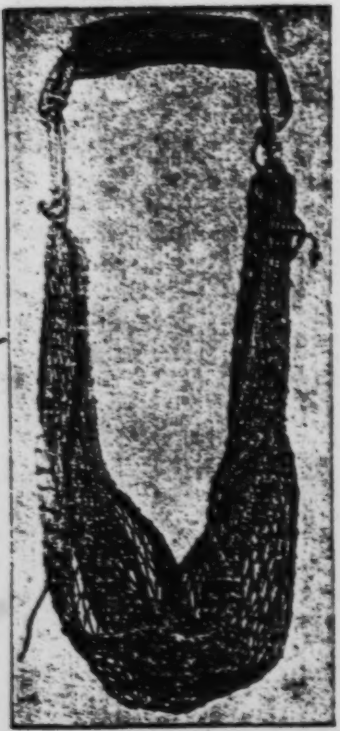

Fig. 133

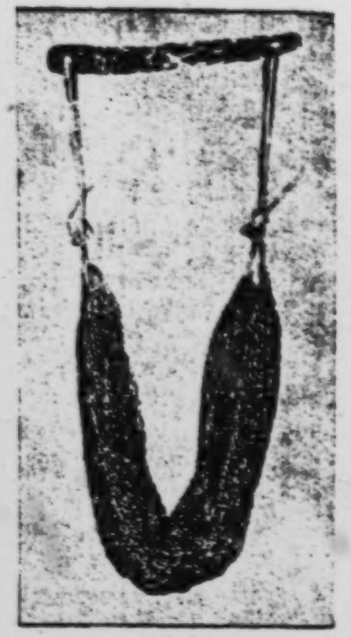

Fig. 134

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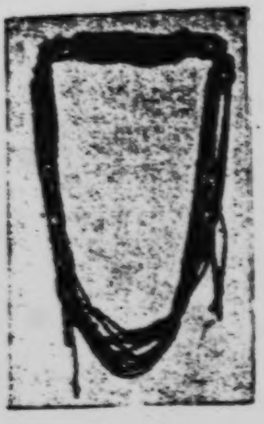

Fig. 135

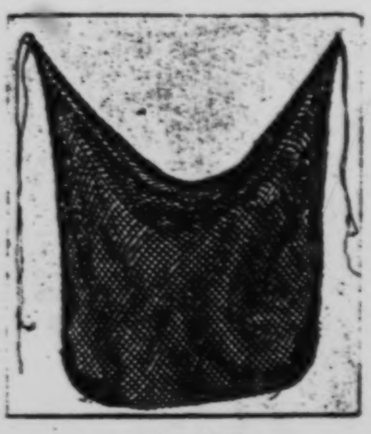

Fig. 136

/The captions are on p. 202./

Chane SF8
Izozo

Ce /Captions for Plates XXXVI and XXXVII/

286 415 482 Fig. 133. (I. A. 768) Net for carrying loads, made with the technique using knots (Izozó). Length 1.33 m. Cf. Figs. 125 /see p. 190/ and 142 /see p. 201/.

C 286 415 482 Fig. 134. (I. A. 567) Net for carrying loads, made with the technique without knots (Chiriguano). Length 1.15 m. Cf. Fig. 143 /see p. 201/.

Ce 286 Fig. 135. (I. A. 772) Net for carrying loads, made with the technique using knots (Izozó). Length 1.18 m:

415 [482] Fig. 136. (I. A. 788) Bag made with the netting technique using knots (Izozó). Height 0.62 m. Length 0.62 m.

Plate XXXVII.

C Ce 286 Fig. 137. Diagrams of twisted threads: a, twisted to the right; b, twisted to the left.

Fig. 138. Diagram of the two different knots applied in the making of nets: a and b, "reef knot"; c and d, "sheet knot."

Ce 286 Figs. 139-141. Diagrams of the plaited middle parts of three cotton bands for women's hair (Izozó): Fig. 139 (I. A. 649); Fig. 140 (I. A. 652); Fig. 141 (I. A. 646).

Fig. 142. Diagram of the technique of the net for carrying loads I. A. 768, using the knot called "reef knot" (Izozó). Cf. Fig. 133 /see p. 200/.

C 286 Fig. 143. Diagram of the technique of the net for carrying loads I. A. 567, made only with loops, without knots (Chiriguano).

Fig. 144. Diagram of the technique of the net for carrying loads I. A. 568, made only with loops, without knots (Chiriguano).

Chané SF8

C
CE /78 cont./ concerning means of
482 transport by land we do not have any evidence except through
489 the sundry implements which serve for carrying burdens. We
492 can assume from the form of the double bags mentioned in the
chapter on weaving that they use their horses and burros to
transport loads.

C The objects used to transport burdens have already been
CE mentioned in preceding chapters. Among them the most gen-
286 eral is the carrying net, which often has a band. By means of
415 it burdens are carried on long trips or the fruits of the harvest
482 are brought in from the fields to the houses, or water is brought,
[484] often from a distance, to the dwellings. The carrying net is
used in such a way that the band goes across the forehead of the
bearer so that the weight of the burden rests on his back (292).

292. See Nord. 2, p. 95.

Nordenskiöld has published a photograph of a woman who is carrying a load in her net (293).

293. Nord. 1, Fig. 87.

C
CE Baskets are not used by the Chiriguano and Chané for carry-
415 ing loads; they are used among these Indians only to store things.
482 Neither is any special band used to carry infants; rather they
[854] are carried in a fold of the tipoy.

Only if water is near the house are water jugs sometimes
carried on the shoulder without a net, but not on top of the head.
C This latter appears only in the cases where the Indians are
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[177] directly influenced by the whites, as happens in the missions (294).

294. Nord. 2, p. 95.

C
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[484] For carrying small amounts of water when traveling, these
Indians also use calabashes enlaced with string, or small baked
clay vessels /79/ provided with a string or a leather strap, such
as, for example, the vessel I.A. 617 shown in Figure 56b.

/79 cont./

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We must still note that the Chiriguano and Chané transport fish in the same way as the neighboring tribes of the Chaco, by stringing them on a cord provided with a big wooden needle (295).

295. Nord. 2, p. 48.

Implements for Storing Objects

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Most of the objects that serve for storing things have also been mentioned in preceding chapters, such as the various kinds of baskets and the wooden hoops which are hung in the houses for storing sundry things in them. The net bag and the carrying net do not serve only for carrying, but also for storing things in them. Baked clay vessels are not only used for storing liquids, but are also used for storing many other things which have a special value or are old memorabilia of the family (296). Furthermore,

296. Nord. 1, p. 179.

C
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[237]

they put up special hooks for hanging various things in the houses. Such a hook is shown in a drawing by Nordenskiöld (297).

297. Nord. 1, p. 177 and Fig. 86.

and Métraux shows such a hook made of a deer's leg (298).

298. Métraux I, Fig. 128.

Art

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Flutes and a Whistle in the Collection

I. A. 491. Flute, "sereré" (Chirig.). Wood. Lgth. 17 cm. Width 2.7 cm. (Fig. 23b.)

I. A. 492. " " " " " 20 cm. Width 2.5 cm. (Fig. 23a.)

I. A. 493. Flute (Chiriguano). Cane. Length 43 cm.

/80 cont./

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The double whistle I.A. 496 consists of two pieces of cane joined together in the manner of Panpipes. In contrast to the flutes described in the preceding, the two tubes of these whistles have lips. One, which has four holes for making the sounds vary, measures 33.5 cm., and the other, which does not have such holes, is only 7 cm. long. A whistle of this kind, but not double, is shown in a drawing by Nordenskiöld (303).

303. Nord. 2, Fig. 36b.

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In addition to these musical instruments, Nordenskiöld describes a few others that he saw among the Chiriguano and Chané. Among them can also be found those round flutes which are used by many tribes of the Chaco and one of which is shown in a sketch by Nordenskiöld (304). They also have large trumpets, which the Chiriguano call "anguahuasi," while the common trumpet is called by the same name as is the mortar, "angúa" or "angúarai." One can also find trumpets made out of a cow's horn or a calabash, which are blown at the upper end (305).

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[524]

304. Nord. 2, Fig. 35.

305. Nord. II, p. 119, Fig. 37 A and B.
Métraux I, p. 337, Fig. 28.

According to Nordenskiöld, the Panpipes, which consist of several flutes joined together, are rarely found among these Indians (306).

306. Nord. 2, p. 126.

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Plastic art is little developed among the Chiriguano and Chané. On rare occasions we find plastic art in the form of animals in the forms of the baked clay pottery of the Chiriguano (307).

307. Nord. 2, Fig. 41, N. 4, and Fig. 45, N. 20.

C CE 415 532 177 /80 cont./
These pots are undoubtedly imitations /Plates XXXVIII-XXXIX appear here/ /81/ of ancient Peruvian models or of modern products. Outside of that there are shown in drawings by Nordenskiöld CE 532 524 two dolls in the form of a man and a woman, made of wax, which served as toys for the children of the Chané of the Parapití River (308). Purely decorative plastic sculpture is C CE 415 531 mainly shown by most of the baked clay vessels intended for cooking foods, in the form of "*ornamento hundido*" /sunken decoration/, which is generally placed on the surface of the neck of these vessels, but it may also extend over the entire surface. Cf. Figure 48 /see p. 116/. In addition to the sunken decoration on the neck the vessel I. A. 414, shown in Figure 44, is decorated with a row of small pointed additions around the wall of the vessel. Linné shows in a drawing a piece of a Chané baked clay vessel, the surface of which is decorated with a border of baked clay placed in a zigzag around the wall of the vessel. Many of the vessels with smooth surfaces also have small additions and generally in pairs. They often have these instead of handles. In addition the baked clay dishes for eating and the dishes for frying /*fritar*/ maize are often provided with such additions. The handles of the baked clay vessels are not in the form of figures, but they can be plastically decorated in such a way that a groove divides them into two parts, which can be twisted around each other. Cf. Figures 46 and 49 /see p. 116/.

Some wooden utensils also have primitive plastic ornamentation, such as the spatulas for stirring food and drink, the wooden dishes for eating, and the large dishes or platters on which food is kept. The handles of some of the spatulas for stirring food are carved in such a way that their edges form zigzag lines (cf. fig. I. A. 579 /not illustrated; see Pl. VIII, p. 20/) and the dishes often have additions such as some baked clay dishes also show. Cf. Figures 18 a and b and 19 /see pl. VIII, p. 50/.

C CE 531 Drawings are also found on the surface of Chiriguano and Chané objects, in the form of paintings on the surface of baked

[Text continues on P. 214]

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308. Nord. 1, Fig. 105.